

Emotional Intelligence's Potential Effect On I.T. Employees In The Fifth Industrial Revolution

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ABSTRACT:

This 5th industrialisation era offers significant benefits, giving job seekers a rather individualised environment. By conducting creation in a way that respects all limits of this ecosystem as well as puts overall welfare of workers employed in at core of such production line, Industry 5.0 recognises its capacity for sector toward fulfilling social objective transcending employment and development in order to become persistent supplier of wealth. In contrast toward the inclinations of Industry 4.0 favoring innovation, dehumanisation, technical progress, & inventiveness, industry 5.0 would return to helping humankind with quality standards. Such industrialisation could make more of the natural intellect visible here than at a workspace. The current task would be to investigate how personal attributes may improve overall working population and get everyone ready toward Industry 5.0. Soft attributes include emotional intelligence. Examining how emotional intelligence may improve overall workplace towards Industry 5.0 has been the objective of this research. 100 employees participated in the survey as a whole. Research indicates how emotional intelligence might affect the workers to function more effectively. It was discovered that emotions guide cognitive as well as emotional awareness & articulation had a higher influence on productivity.

Keywords: Emotional Intelligence, Industrial Revolution, Industry 5.0, Workforce, Productivity.

INTRODUCTION:

As a result of rapidly evolving as well as developing digitalization, surviving even at forefront is becoming harder and far more difficult. Bulk customisation, modern engineering, as well as the technological sector on the whole are all undergoing fast change. International economic issues are being brought on by urgent need of boost competitiveness whilst retaining skilled employees throughout the industrial sector (Nahavandi, 2019). Whereas if idea gets considered through various perspectives, then notion of machines and human beings collaborating may indeed be feasible (Arivarasu, 2019)[1]. Machines can perform monotonous, labor-intensive, even risky tasks, but people can really be employed in customization as well as to evaluate

information even unconventionally. Industry 5.0 faces three primary problems, notably those related to abilities, technologies, & funding (Cojocar, 2021)[2]. Capital is necessitated in addition to efforts and time for such an advanced innovation to be adopted. A fundamental difficulty arises due to the requirement for individuals to possess either the requisite technical as well as interpersonal abilities. Its importance for creativity, longevity, as well as individual efficacy must be emphasised. In order to go from Industry 4.0 to Industry 5.0, it is necessary for those participating within Industrial revolution 4.0 that meet certain criteria, which will be the focus with this study.

LITERATURE REVIEW:

Multiple historical paradigm shifts illuminate the direction that industrial sector has been moving as well as the key characteristics of upcoming "Industry 5.0," which will emerge during subsequent few decades (Arivrasu, 2019).[1]

Throughout the 1700s, the development of machinery driven via liquid, gas, as well as carbon ushered in the beginning of the very first industrial era. This shift in the sector between agrarian to an industrialized manufacturing opened the door towards the construction of the inaugural enterprises.

When breakthrough forms of energy like gasoline, electrification, & petroleum were discovered during the 1870s, industrialisation moved advanced towards its second revolution. The electrifying of assembly plants enabling large scale production gave Industry 2.0 pace. The telephone as well as telegraph were created during that same span of time, revolutionising telecommunication across large distances.

The employment of computers and electronic devices in production didn't start until about a generation afterwards, in the 1970s. Microcontroller, information and technology, & robotics were employed during the third wave of industrialization to greatly automate manufacturing. The accessibility of highly trained labour and cheaper manufacturing costs eventually led to a spike in globalisation and production exporting.

The idea of digitalisation was introduced during the 4th industrial revolution, sometimes known as the "information revolution," and it was incorporated into production. CyberPhysical System, the Industrial Internet of Thing, data and analytic, digital technology, encryption, big data as well as Artificial Intelligence(AI) are some of the connected equipment and technologies that have made factories considerably more productive and intelligent[9].

Japan's definition of Industry 5.0, which it refers to as "human touch" or "Society 5.0" reformation, is as follows: "A sentient civilization that tries to balance the progression of modern economics with the resolving of societal problems through a system that highly incorporates virtual space as well as physical space." The phenomena portrays a society that is forward-thinking and free of information stagflation. In the future, personal skills will become more crucial, with technical abilities becoming significantly less significant (Mohd& Abid, 2020)[7]. Soft skills are the term used to describe certain character traits. The worker benefits from soft skills (Neves, 2021)[12]. Soft skills will also be in greater demand in the future in addition to technological, digital, and data expertise (Moran, 2019)[8]. Soft talents encompass the art of communication as well as the capacity for critical and creative thought.

Subtle Competencies - Emotional Intelligence:

According to studies, emotional intelligence (EI) empowers individuals to think critically and analytically, collaborate in cross-cultural teams, as well as solve complex, unusual challenges that are difficult for even robotic systems to fix. It also facilitates individuals to effectively communicate and represent themselves (Delfi, 2019)[4]. In accordance with the Resources - based View model (de Castro Moura Duarte, Brito, Di Serio & Martins, 2011)[3], an organization's capacities include a collection of competence, abilities, & attributes which aligns sets of activities to fulfil management-defined targets.

There seem to be five essential emotional competences which can be implemented in the workplace, as per Genos Emotional Intelligence (formerly known as Swinburne University Emotional Intelligence Unit) (Palmer & Stough, 2001)[13].

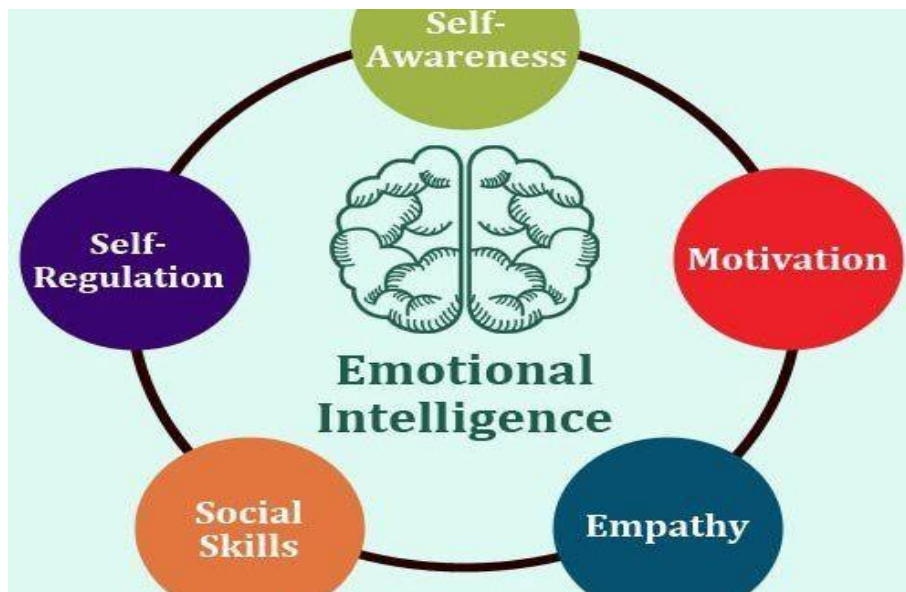


Figure 1: Essential Emotional Competences (Source: medium.com)

- A. The concept of "Emotion Detection & Expressing" relating a worker's capacity to recognise one's own emotional reactions as well as responsiveness as well as their capacity to communicate those moods to their co-workers.
- B. The concept of "understanding others' emotions" alludes to an individual's capacity to identify & comprehend the susceptibility of its work colleagues as well as those emerge in response to office surroundings and group discussions.
- C. In situations requiring judgement call or problem-solving, sentiments and emotional cognition are linked to a point known as "Emotions Direct Cognition."
- D. Possessing self-control as well as that of others good or unpleasant thoughts is referred to as "emotional management."
- E. The term "emotional control" refers to the capacity to actively address emotionally intense situations encountered at job, like as rage, anxiety, worry, and impatience.

METHODOLOGY:

The target population for this study will be Indian businesses engaging in Industry 4.0 initiatives started by the Indian government[10]. The relevant policy implications have been pioneered by the Indian government to advance Industry 4.0:

- A) Innovative production
- B) Internet - Of - things (IoT)
- C) Blockchain technology
- D) Information security Systems
- E) Artificial Intelligence

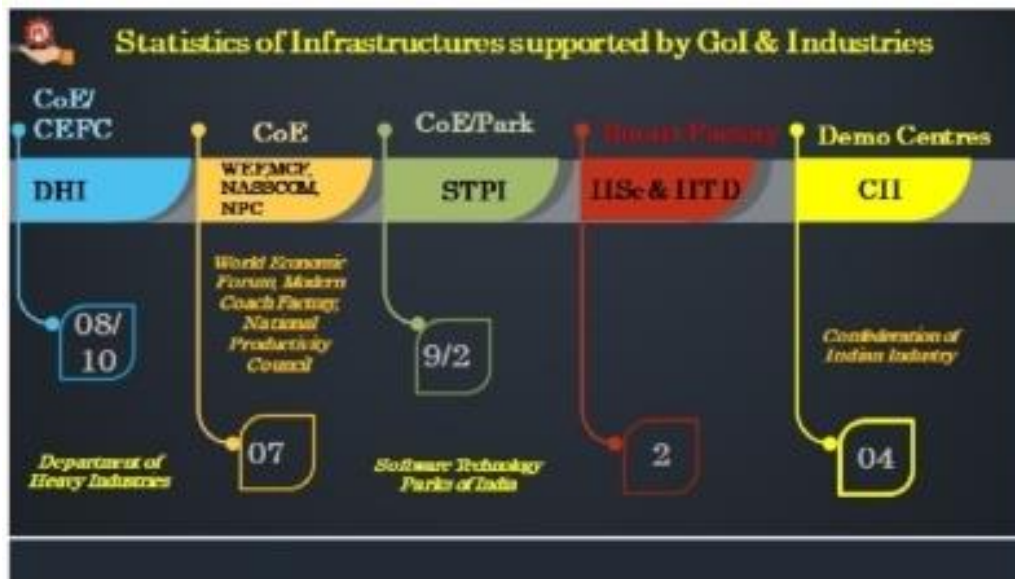


Figure 2: Statistics of infrastructure by GOI under Industry 4.0(Source: <https://www.industrialautomationindia.in/>)

A specific I.T. company was selected for this study since it is one of India's oldest and most successful businesses. In Mumbai, the organisation began activities in 1967. The company only had a small number of employees back then. Currently, the organisation has more than 6,00,000 employees(till June 2022) and branches in Ahmadabad, Baroda, Bhubaneswar, Chennai, Coimbatore, Delhi, Gandhinagar, Goa, Kochi, Gurugram, Bengaluru , Guwahati, Hyderabad, Pune, Bhopal, Indore, Jamshedpur, Kalyan, Thane, Kolkata, Lucknow, New Delhi, Mumbai, Varanasi, , Noida, Nasik, Patna, Thiruvananthapuram, and Nagpur in India.

There were 110 employees at this organisation who took part in the survey. These employees received 2 sets of questions. The surveys included the statements on organisational performance (created by Zulkifli & Perera, 2011) and emotional intelligence (produced by Palmer & Stough, 2001)[13]. As it is observed from Table 1, preponderance of representatives are female (63.6%) & above the age of 40 (54.55%). Over ten years of employment are represented by 58.18% of them. The majority of them appear to be committed to the organisation, based on this. In the workplace, loyalty is a crucial component.

		periodicity	Percentage	Cumulative Percentage
Nationality	Indian	104		94.54
	Non Indian	6	5.46	100
Groups of Age	Not More than 31 years old	2		1.8
	More than 31 but less than 35 years old	18	16.36	18.18
	More than 36 but less than 40 years old	30	27.3	45.45
	More than 41 but less than 45 years old	40	36.4	81.81
	More than 46 years old	20	18.2	100
Gender	Female	70		63.6

	Male	40	46.40	100
Education Level	Diploma	48		43.64
	Professional Qualification	2	1.81	96.37
	Masters Degree	2	1.81	98.19
	Bachelor Degree	58	52.73	100
Marital Status	Married	104		94.54
	Single	6	5.46	100
Functional Units	IT Service Desk.	21		19.09
	IT Administration	12	10.91	30
	Project Management Office.	21	19.09	49.09
	Systems Infrastructure.	20	18.18	67.27
	Operations.	30	27.27	94.54
	Information Systems	6	5.46	100
Employment Duration	Less than 2 years	4		3.64
	More than 2 but less than 5 years	12	10.91	14.55
	More than 5 but less than 10 years	30	27.27	41.82
	More than 10 years	64	58.18	100

Table 1: RESPONDENTS ANALYSIS

DATA ANALYSIS:

With a R^2 of 0.657, or 65.7%, measures of emotional intelligence were responsible for the

variances in organisational performance (see Table 2). The higher than usual proportion demonstrated that EQ does affect the organization's performance.

Model	R	R ²	Adjusted R ²	Standard error of estimate
	.811a	.657	.641	.41879

Table 2: OVERVIEW OF THE RELATIONSHIP IN BETWEEN ORGANISATIONAL PERFORMANCE & EMOTIONAL INTELLIGENCE ASPECTS

It can be observed from the analysis of hierarchical multiple regression that comprehending other people's emotions has a p

value greater than 0.05. The p values for the other four emotional competencies—emotional recognition & expression, emotion-directed reasoning, management of emotions, and emotional regulation less than 0.05. These four emotional skills were discovered to be significantly positively correlated with organization performances (in Table 3).

Models		Un-standardized coefficients		Standardised Coefficients	T	Sigma
		B	Standard error	Beta		
1	Constant	0.23	.331		.069	.945

	Emotional Recognition and Expression	.320	.070	.325	4.565	.000
	Understanding Others Expression	.158	.082	.149	1.931	.056
	Emotions Direct Cognition	.250	.072	.263	3.477	.001
	Emotional Management	.164	.076	.168	2.155	.033
	Emotional Control	.178	.069	.167	2.596	.011

Table 3: ORGANIZATIONAL PERFORMANCE AND CHARACTERISTICS OF THE EMOTIONAL INTELLIGENCE: A COEFFICIENT ANALYSIS

The t values of emotional awareness and expression and emotions-direct cognition are two emotional abilities that are fairly high. T values represent the influence of the independent variables upon that dependent variable. The investigation shows that emotional intelligence is crucial to the organization's effectiveness. According to the findings, as shown in Table 3, Overall organisational performance was shown to be positively & significantly impacted by emotional detection & presentation, management of emotions and emotional regulation (focused more on interpersonal skills), plus emotion directly reasoning (concentrating mostly on capacity in problem-solving circumstances). Employees' decision-making abilities are enhanced by emotions that direct cognition. Any corporate entity must make decisions, and doing so is essential to the organization's success. While some workers might prefer making decisions based on facts, others prefer trusting their gut instincts, which are informed by previous years of experience. Professionals look and feel better when their decisions help the organization reach its objectives. Professionals' leadership abilities are enhanced by this. There is no room for doubt when making decisions. A particular employee must depend entirely on the available information and proceed using a timely and accurate judgement. The choice that is taken will affect the organization's future.

Neves (2021) has advocated for the importance of soft skills in the workforce[12]. Technical expertise is acknowledged to be crucial since it

helps workers to comprehend the technology used. The art of communication and mutual understanding are two examples of soft talents that balance the professional atmosphere (Forbes, 2019)[6]. Humans and technology are working together in Industry 5.0, as proposed by Japan's "human centric approach." They must possess the capacity to perform tasks which robotic systems cannot [5](Euronews, 2021). By fusing processes with intelligent systems, the Fifth Industrial Revolution will connect humans and machines to better leverage human creativity and brainpower. According to the survey, it is hypothesised that emotions drive cognition would improve decision-making abilities, particularly in terms of enhancing the innovation and effectiveness of the organisation.

CONCLUSION:

The above investigation looks at the characteristics of emotional intelligence as well as how they relate to an organization's effectiveness. The results indicated that emotional intelligence may boost the workforce in Industry 5.0 through its four aspects. In Industry 5.0, humans & machines are expected to interact further harmoniously[11]. The personnel would be able to improve the organization's performance through their decision-making skills and communication skills. The peace in the workplace is the emphasis of communication art. Employees must have good emotional control, especially in stressful situations. The results demonstrated that emotional management and control had a

substantial impact on the organization's success.

A specific IT sector was the subject of the investigation. It's possible that the findings don't apply to other industrial IT organisations. Future research on this topic should focus on other Indian IT companies, it is strongly advised. Due to the online nature of the study, the author was unable to distribute questionnaires to the organization's executives. On behalf of the author, the human resource staff was tasked with dispersing and gathering the surveys. It would be beneficial for future research if more businesses in the same sector participated. The understanding of the topic would be improved by the findings.

DECLARATIONS:

CONFLICT OF INTEREST: The authors have no conflicts of interest to declare that are relevant to the content of this article.

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