EMOTIONAL INTELLIGENCE AND ARTIFICIAL INTELLIGENCE: A COMPARATIVE ANALYSIS

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ABSTRACT

"Your body has a mind of its own of which your mind has no knowledge"

John H. Pflaum, Delightism, 1972 (Prentice Hall)

The term emotional intelligence was first used in 1985 by Wayne Payne. In 1930 the psychologist Edward Thorndike used the concept of social intelligence, that means the ability of individuals to get familiar with society. Emotional Intelligence also known as EI, is the state of being able to recognize and act upon behavioral traits of oneself as well as others. The first purpose is to recognize, understand and manage ones own emotions. The second purpose is to recognize, understand and influence the emotions of others. Artificial Intelligence is the process of exhibiting human-like roles into machines or computers. In other words, the science and engineering of creating machines which portrays the basic fundamentals of human beings is called Artificial Intelligence. Both emotional intelligence and artificial intelligence have been popular over last two decades. In this paper we will be talking about comparison between both emotional and artificial intelligence.

Keywords: Emotional intelligence, Artificial intelligence .

1. INTRODUCTION

"Yam hi na vyathayanthyethe purusham purusharshabha Samadhukha sukham dheeram somruthathvaya kalpathe"

This analytic sloka from the Bhagavad-Gita (Chapter II, Verse 15) sums up the entire concept of Emotional Intelligence (EI). It says: a person who is calm and remains unperturbed by either pain or pleasure is the one who attains immortality.

Emotional intelligence *is* a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective

regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life.

2. EMOTIONAL INTELLIGENCE

The concept of EI which has been popularized by Goleman can be traced down to David Wechsler, who, as early as in 1940 said that intelligence does not denote just the cognitive abilities of a person but the non-cognitive abilities as well. This idea was again put forward by Howard Gardner in 1983 when he brought forth the multiple intelligence theory and said that intrapersonal and interpersonal skills are as important as the traditional concept of intelligence which focused on the cognitive skills alone. In 1990, Mayer and Salovey introduced the concept of Emotional Intelligence as a distinct form of intelligence which can be measured and evaluated.

Later, multiple definitions were derived for this term, EQ, i.e., emotional intelligence. And the people started considering it as a parameter of personality and success. Sometimes people confuse EQ with IQ, but that is something totally different.

Emotional intelligence is basically defined as an ability of an individual to perceive, control and evaluate emotions. Emotional intelligence has always been a debatable topic for researchers, while some feel that it can be learned and strengthened, others find it as an inborn characteristic.

3. COMPONENTS OF EMOTIONAL INTELLIGENCE

Emotional intelligence is not a single step process, but a whole complex process that involves different components. The major components of emotional intelligence are as follows:

3.1 PERCEIVING EMOTION

In order to understand emotions, it is essential to perceive or receive them accurately. For this it is essential to involve correct nonverbal signals, body language and facial expressions.

3.2 REASONING EMOTIONS

After perceiving or sensing the emotions, the next step is reasoning of the emotions. It involves employing emotions to promote thinking and cognitive activity. This process defines the way in which we respond to emotions.

3.3 UNDERSTANDING EMOTIONS

The third step of emotional intelligence is to understand emotions and try to interpret them. For example, if your mom is angry with you, you try to interpret the cause of it, if either it is your low marks or if you haven’t assisted her with some work.

3.4 MANAGING EMOTIONS

The final component of emotional intelligence is managing emotions. It is the crucial part and

the most complex one. It is important to manage emotions in order to regulate and respond to the emotions in the right way.

4. IMPORTANCE OF EMOTIONAL INTELLIGENCE

Emotional intelligence is as important as emotions in the world. Just suppose how terrible you will feel if you are not able to understand the sorrow or happiness of your close one.

The families and friends in the world are bound by emotions, if there will be no emotions, the earth won't be a social place anymore. In fact, emotional intelligence is more important than IQ to achieve success and stability in life.

4.1 ARTIFICIAL INTELLIGENCE (AI)

Artificial intelligence (AI) can be defined as a technology that embeds intelligence in machines. It is human created technology that makes machines think like humans. This helps the machines to take some important and major decisions without human inference.

5. TYPES OF ARTIFICIAL INTELLIGENCE

Depending upon its mechanism and applications, artificial intelligence is basically classified into the following three categories.

5.1 NARROW INTELLIGENCE

ANI expanded as Artificial Narrow Intelligence is the most common form of AI. This form is employed for every next application in the market. This is the simplest type of AI. Weak AI can perform a single task at a time.It is designed to solve one single problem and has narrow capabilities. It is quite similar to human functioning in a specific context.

5.2 GENERAL INTELLIGENCE

AGI is expanded as Artificial General Intelligence. This intelligence doesn't exist till yet and is a theoretical content. General intelligence is defined as AI that has human level cognitive function. Scientists worldwide are still working to build an AGI system.An AGI system needs to compromise thousands of ANI systems working parallel. The processing of an AGI system is a complex process as it resembles the exact working of human neuronal activity.

5.3 SUPER INTELLIGENCE

ASI is expanded as Artificial Super Intelligence. It is a science fiction territory and is also termed as future intelligence sometimes. ASI or super intelligence will surpass all human capabilities.If scientists are able to design an ASI system, it would help the machines to make rational decisions. It would also help robots and machines to build emotional relationships like humans.

6. DIFFERENCE BETWEEN ARTIFICIAL AND EMOTIONAL INTELLIGENCE

The key differences between emotional intelligence and artificial intelligence are:

1. Taking the current scenario in consideration, AI is something related to machines and emotional intelligence is something related to humans and hearts.
2. AI is the theory and development process of computers. On the other hand, emotional intelligence refers to the handling, management and response of human emotions.
3. AI algorithms once fixed don't change unless altered by a human hand, while emotional intelligence changes from situation to situation and varies from time to time.
4. AI automatically analyzes gathered information and finds current errors, while emotional intelligence works on current and live information.
5. Emotional intelligence focuses on manual labor, while AI is a game of machines and technologies.
6. Emotional intelligence builds the emotional competencies of individuals while there is no such role of AI in building personal development. Emotional intelligence attempts to enhance an individual's key personal emotional competencies as well emotional intelligence relationship skills for both personal and professional success.
7. AI has the capability to gather, analyze and interpret data, emotional intelligence has capability to perceive, understand and manage emotions.
8. Emotional intelligence builds the leaders or manpower, AI builds the machine power or workers.

7. COEXISTENCE OF ARTIFICIAL INTELLIGENCE AND EMOTIONAL INTELLIGENCE

Though, scientists and researchers are working to infuse machines with emotions and make artificial intelligence coexist with emotional intelligence. But, till that time, there was no coexistence like this. Ultimately, Humans can definitely offer more to the business world than machine, machines still need to develop their capability to feel love, compassion and empathy or to feel like us, the humans.

On the other hand, humans already possess those emotions which inadvertently makes them better than machines. In the near future, we can expect machines to develop with these capabilities. Till the time machines get in line, human resources are already here to serve the globe.

8. CURRENT STATE OF AI AND EMOTIONAL INTELLIGENCE

Artificial Intelligence (AI) has come a long way since its inception, with advancements in

technology and research leading to incredible developments. AI is used in various industries, from healthcare to finance, to improve efficiency, accuracy, and productivity. AI is also being used to develop more sophisticated systems for understanding and responding to human emotions. Learning and responding to human emotions is known as Emotional Intelligence (EI), and it has the potential to revolutionize the way we interact with technology.

EI is the ability to recognize, understand, and respond to emotions. It involves understanding the emotions of oneself and others and the ability to use this information to make decisions and interact with others. AI has the potential to help us better understand and respond to emotions, as well as to create more efficient and accurate systems for responding to them.

AI has already been used to develop systems that can detect and respond to emotions in various ways. For example, AI can see facial expressions, tone of voice, and body language to better understand a person's emotional state. AI can also analyze text and speech to detect and respond to emotions.

AI is also being used to develop systems that can respond to emotions more naturally and effectively. For example, AI can create chatbots that can interact with people more naturally and create virtual assistants that can respond to emotions more humanly.

AI can detect basic emotions such as joy, sadness, and anger, but it is not yet able to interpret more complex emotions such as guilt, shame, or fear. Additionally, AI cannot accurately predict how humans will react to certain situations, as this requires a deep understanding of human behavior and psychology.

The current state of AI and EI is still in its early stages, but the potential for these technologies to revolutionize how we interact with technology is immense. Furthermore, with continued research and development, AI and EI have the potential to become even more powerful tools for understanding and responding to human emotions.

9. CONCLUSION

Concludingly it can be said that AI has made significant strides in recognizing and responding to human emotions on a rudimentary level, such as understanding if a person is happy or sad through their tone of voice or facial expression. However, this is a far cry from a true understanding and empathizing with human emotions—the intricacies, nuances, and contextual understandings that come with human emotional intelligence are currently beyond AI's reach.

AI lacks the personal experiences and consciousness that inform human emotions. It processes information and responds based on its programming and learning algorithms. It's devoid of feelings or emotions and does not understand these experiences the same way a human does. Therefore, AI struggles to navigate the rich textile of human emotions and to replicate the breadth and depth of emotional understanding that humans possess naturally.

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