FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

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The Patent Rules, 2003

COMPLETE SPECIFICATION

(See section 10 and rule 13)

TITLE OF THE INVENTION

"Methodology to observe the Impact of the Internet of Things on Job Flexibility and
Productivity in the IT Economy"

We, applicant(s)

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The following specification particularly describes the nature of the invention and the

manner in which it is performed:

FIELD OF INVENTION:

Internet of things (IoT) sensor network is being used in the development of a new method and framework for increasing productivity in the workplace through increased job adaptability.

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Background:

A business's employees must be its most valuable asset if it is to meet market demand and meet the ever-increasing demand for its products. Management must maintain the link between work-life balance and

10 employee productivity.

When a company has a large number of people working hard to achieve the company's objectives, it is called a corporation. As a result, an employee's productivity and performance have a direct and indirect impact on the organization's performance.

15 Ineffective project management is the most common cause of low productivity in the workplace. Lack of supervision, obstacles in communication, vague goals and objectives, excessive work, unhealthy working conditions, a dearth of incentives, and so on are all signs of ineffective management. Inadequate job distribution will lead to a decrease

20 in overall productivity, which is inevitable. There are several ways in which an employee's performance can be negatively impacted, such as if they waste time on activities that aren't productive, sit around and do nothing, or devote too much time to one task.

So, it is important to analyse the employee's productivity, maintain job

25 flexibility, and motivate them regularly, as well. Employee productivity can

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be increased by increasing job flexibility through an Internet of Things-based system proposed by the inventors. In the organization's current system, the method that has been presented and disclosed can be used either with or without any modifications.

As used in the description herein and throughout the claims that follow, the meaning of "a," "an," and "the" includes plural reference unless the context dictates otherwise. Also, as used in the description herein, the meaning of "in" includes "in" and "on" unless the context dictates otherwise.

The objective of the invention:

1.   The goal of the current implementation is to create a reliable database and to keep track of employees to minimise manipulation.

2.   In addition, a goal of the current disclosure is to create a work environment where employees are more likely to be productive.

3.   Reduce job rigidity at work as a goal of the embodiment.

A detailed description of the invention:

A sensor-based system and method for improving the work-life balance of employees is the subject of the current invention, number 100. Employee performance evaluation systems and methods, as well as any potential issues that may arise, are the focus here.

Making jobs more adaptable for industry workers is one way to put the System into action for increased productivity and performance.

Monitoring workers' activities and movements using Internet of Things (IoT) sensors while they are on the job The sensors keep an eye on the

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employee, and the data they collect is transferred to the employee monitoring system, the organization's database, and finally to the cloud storage system, which is where upper management and human resources can access it.

5 Processors are defined herein as including, but not limited to, microprocessors, microcontrollers, CISC microprocessors, RISC microprocessors, VLIW (very long instruction word) microprocessors, and any other type of processing circuit. "Processing means" or "microprocessor" or "processor" or "processors" are used interchangeably

10 throughout this disclosure. In addition, the processing element can be referred to as a "processor" as well.

The machine learning mechanisms, such as Bayesian networks and deep learning and random forests and supervised vector machines and reinforcement learning and prediction models such as Statistical Algorithms,

15 Classification Logistic Regression Support Vector Machines Linear Discriminant Analysis K-Nearest Neighbors, Decision Trees, Random Forests and Regression, Linear Discriminant Analysis Support Vector Machines Logistic Regression Accumulative and Divisive Hierarchical Clustering are two examples of hierarchical clustering. K-Means Clustering,

20 K-Nearest Neighbors Clustering, EM (Expectation-Maximization) Clustering, and other techniques can be used to learn sensor and hardware components. Non-Negative Matrix Factorization (NMF), Kernel PCA, Linear Discriminant Analysis (LDA), Generalized Discriminant Analysis (kernel trick once again), Ensemble Algorithm (PCA).

As used in this document, the terms "non-transitory storage device" (NTSD) and "storage" or "memory" refer to random-access memory (RAM) and read-only memory (ROM) and their variants, in which a computer can store data or software for as long as necessary.

5   If you're an expert in the relevant field, it should be obvious to you that the inventive concepts presented here are open to a wide range of additional modifications. As a result, the inventive subject matter is not limited in any way other than by the spirit of the claims attached.

We Claim:

1. Claim 1's system includes a Database system that is both functional and secure, a sensor for recording human activity such as movements and gestures, a power supply for the sensor system, a microcontroller for processing, and an ML/AI algorithm for prediction, and System of Online Storage

2. One or more systems are used in claim 1, and a collection unit is used to gather performance data.

3. Employee activities such as working hours, lunch breaks, task completion times, facial expressions, and other factors will be tracked using sensors by claim 1.

4. Worker monitoring software can send data from sensor readings to the company database, as per claim 3 of the system. Information about employees will be transferred to the cloud storage system from the database. Management and HR can take action based on employee performance in a location where data can be accessed from remote locations.

5. A cloud storage system is used in claim 1 to make the database more secure.

Dated this 5th day of July 2022

Applicant(s)

Dr. Suryabhan Pratap Singh et. al.

ABSTRACT

Methodology to observe the Impact of the Internet of Things on Job Flexibility and Productivity in the IT Economy

Implementing this strategy and system will not only encourage workers to give their utmost effort in their work, but it will also make it possible to increase the overall productivity of the workforce. As a result, the overall productivity of the workforce will be able to increase as a result of this. The purpose of this disclosure is to provide a more in-depth discussion on the use of sensors connected to the Internet of Things and software that is driven by artificial intelligence to monitor employees. It is now possible to monitor the actions taken by workers as well as the amount of time they spend in particular areas of the workplace or carrying out particular responsibilities thanks to the installation of a variety of sensors in various locations throughout the workplace. This makes it possible to monitor not only the actions taken by workers but also the amount of time they spend in particular areas of the workplace or performing particular responsibilities. After the information has been gathered, it is then transferred to an employee monitoring software that is powered by AI. This software manages the data according to how well the employee has carried out their responsibilities.

Dated this 5th day of July 2022

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