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(57) Abstract :
ABSTRACT METHOD AND SYSTEM FOR DETERMINING EMPLOYEE PRODUCTIVITY AND MOTIVATION IN REAL-TIME USING MACHINE LEARNING (ML) MODELS The present invention provides an approach for determining employee productivity and motivation in real-time using machine learning (ML) models.In order to determine the employee productivity, the method and system provides a communication module, a processor configured to control the communication module and storage totransmit, to a plurality of terminal devices, work request data corresponding to the registered work request,receive, a response to the work request information. The method and system transmits to one of the terminal apparatuses from which a response to the work request information was received, transmit, to the plurality of terminal apparatuses other than the designated terminal apparatus, a cancellation notification that cancels the work request using one or more machine learning models.

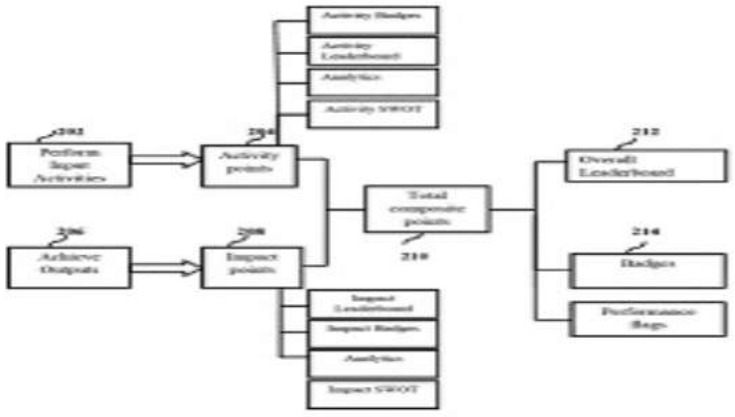

FIG. 1

No. of Pages : 21 No. of Claims : 6

COMPLETE SPECIFICATION

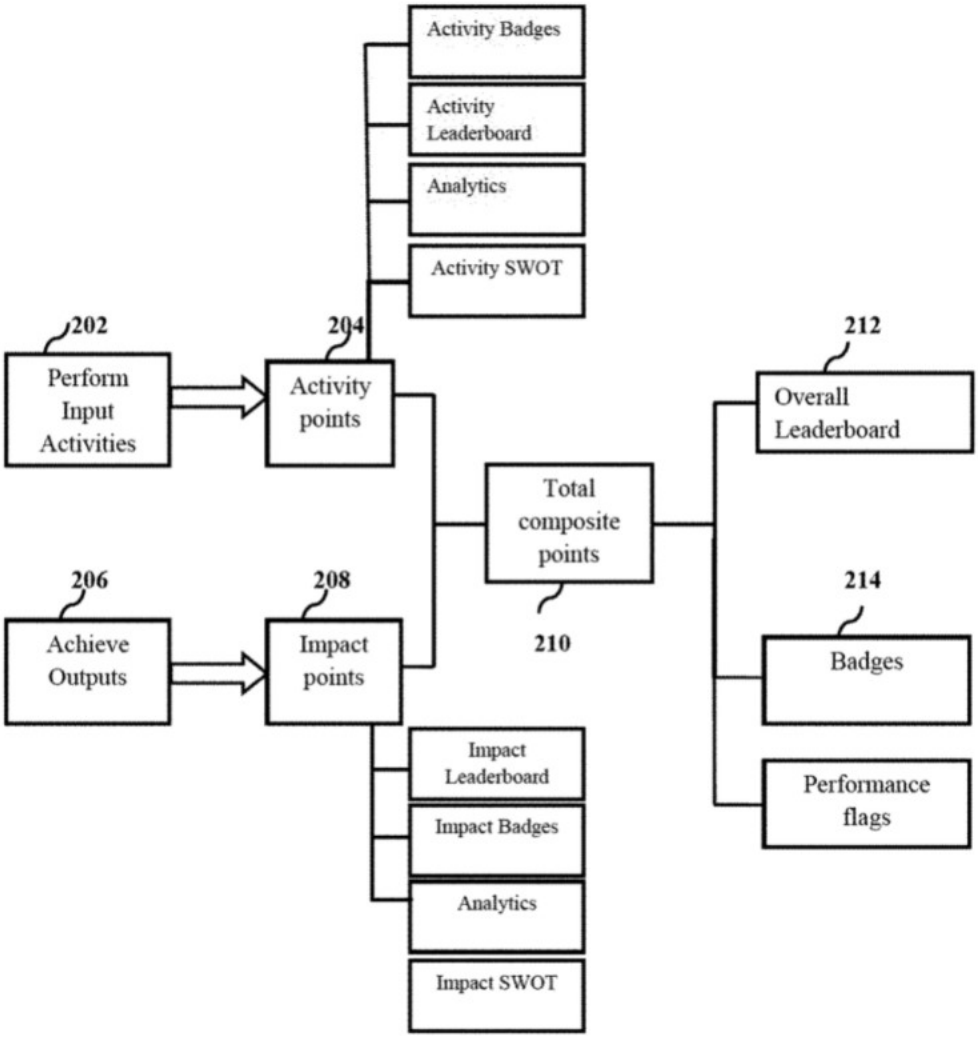

FIG. 1

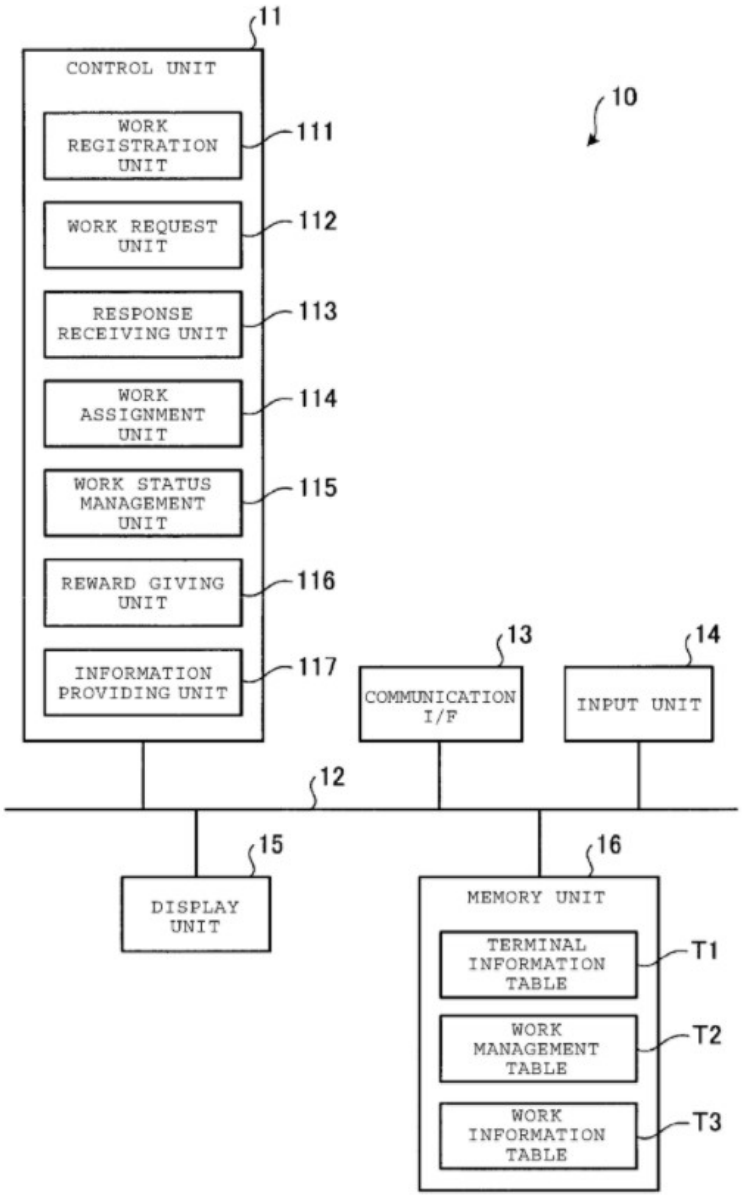
11
CONTROL UNIT
10
WORK REGISTRATION UNIT
111
WORK REQUEST UNIT
112
RESPONSE RECEIVING UNIT
113
WORK ASSIGNMENT UNIT
114
WORK STATUS MANAGEMENT UNIT
115
REWARD GIVING UNIT
116
INFORMATION PROVIDING UNIT
117
13
COMMUNICATION I/F
14
INPUT UNIT
12
15
DISPLAY UNIT
16
MEMORY UNIT
TERMINAL INFORMATION TABLE
T1
WORK MANAGEMENT TABLE
T2
WORK INFORMATION TABLE
T3

FIG. 2

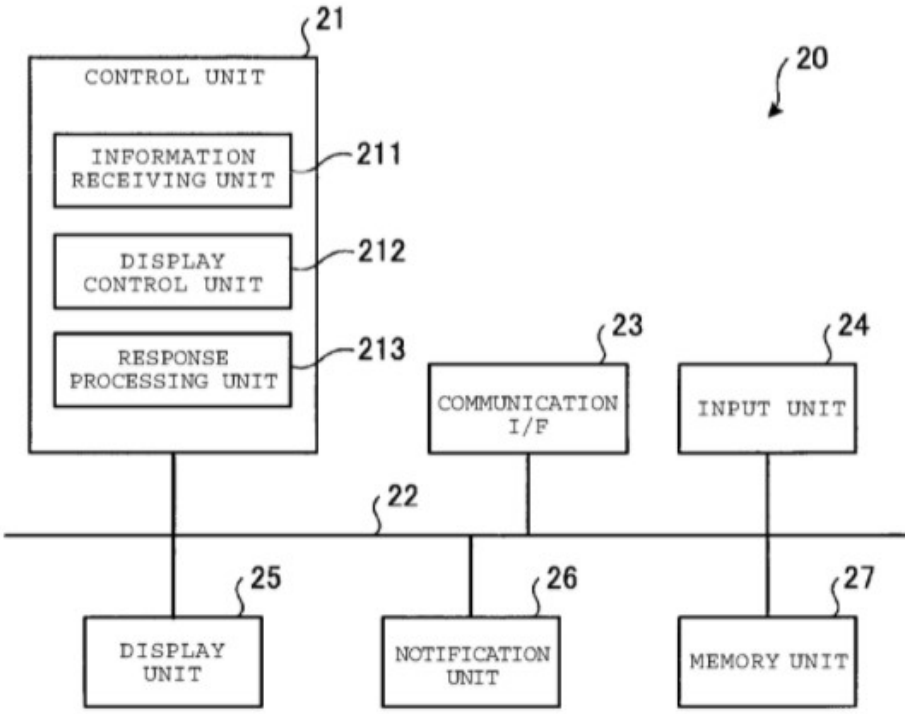
21
CONTROL UNIT
20
INFORMATION RECEIVING UNIT
211
DISPLAY CONTROL UNIT
212
RESPONSE PROCESSING UNIT
213
23
COMMUNICATION I/F
24
INPUT UNIT
22
25
DISPLAY UNIT
26
NOTIFICATION UNIT
27
MEMORY UNIT

FIG. 3

FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

&

THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

[See section 10 and rule13]

1. **TITLE:** METHOD AND SYSTEM FOR DETERMINING EMPLOYEE PRODUCTIVITY AND MOTIVATION IN REAL-TIME USING MACHINE LEARNING (ML) MODELS

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The following specification particularly describes the invention and the manner in which it is to be performed

METHOD AND SYSTEM FOR DETERMINING EMPLOYEE PRODUCTIVITY AND MOTIVATION IN REAL-TIME USING MACHINE LEARNING (ML) MODELS

FIELD OF THE INVENTION

[0001] The present invention generally relates to determining employee productivity. More particularly, the present invention relates to determining employee productivity and motivation in real-time using machine learning (ML) models.

BACKGROUND OF THE INVENTION

[0002] Over many decades, companies are constantly trying to improve performance management techniques for driving workforce productivity and performance of employees as measured through the lens of key performance indicators (KPIs), generally defined at a monthly quarterly or annually. Companies adopt various strategies to improve employee productivity and engagement through various practices such as target setting (i.e., defining targets, making targets transparent, clear and measurable for each employee), continuous monitoring of employee performance against targets, linking pay with performance, offering incentives and bonus based on performance, conducting, periodic performance discussions at the workplace etc., thereby attempting to influence focus areas and performance of employees.

[0003] In order to address the issues of employee performance and engagement mentioned above, companies have recently started adopting gamification techniques as an innovative and game-based approach to managing performance and driving engagement by stimulating motivation levels, especially by influencing intrinsic motivators which, by definition, are not linked to external or monetary rewards. Such gamification techniques are also enabling employees towards self-management, which is a practice where each employee manages his/her own performance by carefully tracking their performance digitally and developing a self-improvement plan. Through gamification, the workplace engagement levels are stimulated using a series of tools and techniques typically found in video or digital games.

[0004] Further, the method includes managers agreeing mutually on individual goals (employee performance targets) which are typically aligned with the short-term and/or long-term goals of the organization. In other words, targets are set top-down and employees typically have limited flexibility in setting their own goals; in particular, at lower rungs within organizations, employees have limited say in the definition and/or quantum of these goals targets. Furthermore, suggestions for improving the performance are made by the direct line manager of the employee in a joint consultative manner. Performance interactions between direct line manager and employee tend to be ad-hoc and vary from team to team within an organization. In other words, the management practices around performance dialogues and performance discussions are unstructured and vary from one-line manager to that of the other line manager.

[0005] For instance, to drive performance, employee-level competitiveness is harnessed in a positive manner and captured through leaderboards to drive a greater sense of competition/goal-orientation in the workplace and thus generating an increase in overall productivity. The rules of the 'game' provide employees with a clear understanding of goals, metrics, timelines and behaviors that lead to attaining higher performance levels and achieving rewards and recognitions in such gamified systems. At the core such gamified systems have a constant tracking of achievement i.e., score-keeping e.g., via a game 'currency' such as "points". Achievements are broadcasted on private and public scoreboards, thereby providing near real-time feedback and score-keeping for the employees.

[0006] Currently in most performance management systems and approaches, a method of managing employee performance is largely "output" oriented i.e., based on "output" or "results" achieved by the employee. The method does not typically factor "inputs" or the day-to-day activities and efforts of employees that drive or lead to results.

[0007] However, if the work is assigned according to the static work plan, there is a possibility that waste occurs. In such a case, there may be a decrease in motivation because the productivity of employees does not increase according to the actual status of the store. If the work is assigned by the work manager, there is a possibility that the relationship between the work manager and the employee influences the assignment of the work. Also, there is a problem that the assignment of work depends on the ability and perception of the work manager.

[0008] The above-mentioned shortcomings, disadvantages and problems are addressed herein and which will be understood by reading and studying the following specification.

BRIEF DESCRIPTION OF FIGURES

[0009] FIG. 1 illustrates a flowchart determining employee productivity and motivation in real-time using machine learning (ML) models in accordance with an embodiment of the present invention;

[00010] FIG. 2 illustrates configuration of ML based work management server in accordance with an embodiment of the present invention;

[00011] FIG. 3 illustrates configuration of work management server for increasing efficiency and motivation of an employee in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[00012] The following details present a simplified summary of the embodiments herein to provide a basic understanding of the several aspects of the embodiments herein. This summary is not an extensive overview of the embodiments herein. It is not intended to identify key/critical elements of the embodiments herein or to delineate the scope of the embodiments herein. Its sole purpose is to present the concepts of the embodiments herein in a simplified form as a prelude to the most detailed description that is presented later.

[00013] The primary object of the embodiments herein is to provide a system and method to enhance performance management in organizations (especially at the “frontline” i.e., at the lower rungs in the organization by incorporating a gamified self-management technique supported by gamification techniques and a novel concept of ‘game-plan’, a feature that allows employees to break down targets (set by the organization) into smaller goals/sub-goals that the employees define (e.g., monthly targets can be broken down into weekly sub-goals). Using game-plan, employees can set personalized goals that are built around the targets defined by the line manager and/or senior management.

[00014] These personalized goals can very well be over and above the targets defined by the management For example, an employee can set his personalized goal to become a top-3 employee in his division. As such, these personalize goals are not meant to be a replacement of the targets that the management may have set for the employee; instead these personalized goals are meant to capture an employee's personal aspiration and is guided by the targets defined by the management.

[00015] Yet another objective of the embodiments herein is to provide game-plan simulation feature that enables an employee to set individualized goals, follow through on these goals, compare these goals and achievement towards these goals against benchmarks internal benchmarks of the organization), run scenarios to understand and visualize what levels of outputs are needed to achieve specific objectives such as attaining certain rank in the organization leaderboard, winning a specific badge and/or becoming a top performer.

[00016] Yet another objective of the embodiments herein is to provide a game-plan simulation feature that enables an employee to understand the average levels of inputs required to attain a certain output, such as, understanding the number of client calls required to close a sale. Numbers of clients called represent an input measure while closing a deal or a sale represents an output.

[00017] Another objective of the embodiments herein is to provide a system and method to track employee’s performance and ensure transparency in an organization, to understand and correlate the input activities performed by employees and outputs achieved, in order to enable mechanisms for orienting and motivating employees on input factors, activities over and above outputs or results.

[00018] According to an embodiment herein, the action tracking module tracks the input activities performed by the employees of the enterprise including but not limited to submitting a client call report, creating and/or updating a sales lead, completing a learning module, referring a sales lead to another employee, following-up on business leads, submitting a business idea, completing internal project milestones, daily attendance, time spent at work or on a particular

work systems (e.g., a caller calls prospective clients). The action tracking module tracks and feeds the activity related information to the performance management module.

[00019] Fig. 1 illustrates a flow chart explaining a method of enhancing the employee engagement by implementing one or more machine learning (ML) models. The employee performs the various input activities for achieving desired output (202). The action tracking module tracks the input activities performed by the user and resulting outputs. The input activities are performed in order to achieve, the personalized goals set by the employees or targets set by the organization and/or to win challenge campaigns designed in the system. The input activities of the employee include but are not limited to submitting a client call report, creating sales lead, following-up on business leads, meeting a customer, submitting a business proposal, submitting a business idea, completing internal project milestones and completing a learning module.

[00020] Additionally, input activities could include input factors such as employee attendance, referrals made by the employee to other employees, amount of time spent by the employee at the workplace, number of core processes initiated by the employee or completed by the employee (processes for which the employee is responsible for). The action tracking module translates the activities into activity points in the application. Similarly, the outputs achieved by employees are converted into impact points. The outputs achieved by the employee include but are not limited to achievement against a KPI, the closure of a sale, completion of a process/project, launch of a product, achieving revenue/profit/cost targets etc. Both impact points and activity points form the basis for running all key analytics, ranks, badge calculation, SWOT etc. For example, based on the activity points earned by the employee activity rank, activity related badges, activity SWOT and activity conversion ratios are calculated. System provides several triggers to motivate the employee to increase activity levels. Recommendations, campaigns, challenges are mechanisms built on top of ranks, badges, SWOT that stimulate an employee towards action. Impact points are awarded to an employee as and when the system receives the input feed of outputs achieved by the employee (this can be near real time or in some cases be awarded on a daily basis if outputs take a longer time to consolidate/validate in the organization).

[00021] The activity points and impact points, when taken together, are used for translating the overall employee performance into a single output i.e., overall points, which are particularly helpful in comparing employees from different teams/divisions within the organization who may not necessarily have same targets tasks to perform. Overall points thus bring all employees under one umbrella of comparison. Further, the activity points and impact points help the employee to visibly understand the relation between input activities (effort) and outputs achieved (result) and thereby driving home a simple message that employee productivity can be improved by increasing the input levels and the input conversion factor to output—a message that lays at the core of this efficient gamified performance management system.

[00022] The points module translates employee's input activities into activity points based on the conversion metric defined by the organization (204). The activity points are awarded almost near real-time, thereby creating a greater level of engagement and competition as explained in [00134]. The activity points are awarded for the employee actions/activities and hence motivate every employee to focus on performing more activities/take more actions, thereby enhancing the overall employee productivity of the organization.

[00023] Further, the application also tracks the outputs achieved by the employee. The activity tracking engine tracks the outputs achieved by the employee (206). The outputs achieved by the employee include but is not limited to achievement against a KPI, the closure of a sale, completion of a process/project, launch of a product, achieving revenue/profit/cost targets etc. The application converts the achievements of the employee into impact points. Further, the impact points are fed to the performance management module.

[00024] The points module converts the activities into activity points and outputs achieved to impact points (208) and is available to be analyzed at all levels and at every individual employee, thereby creating transparency in evaluating the employee performance and the corresponding generated output.

[00025] Further, the method adds the activity points and impact points to find the total composite points earned by the employee (210). The employee redeems the total composite points or impact or activity points to various tangible and intangible benefits. The tangible and intangible

rewards drive employee motivation and more broadly the employee productivity and engagement.

[00026] Further, the method broadcasts the names of the employees on the leaderboard in the decreasing order of the total composite points earned by the employee (212). The leaderboard is a scoreboard showing the names and current points of the leading employees in the organization. Leaderboard ignites competitiveness among employees by showcasing the performance of the top performers. The method includes multiple leaderboards for overall points, impact points, and activity points and for individual KPIs and activities, in order to allow the comparison of employee's performance across multiple dimensions.

[00027] The work management server 10 has the configuration as illustrated in FIG. 2, for example. FIG. 2 is a diagram illustrating an example configuration of the work management server 10.

[00028] As illustrated in FIG. 2, the work management server 10 comprising one or more machine learning (ML) models also include a control unit 11 including a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), and the like. The control unit 11 also performs a clock function such as real time clock (RTC).

[00029] The control unit 11 is connected to a communication interface (I/F) 13, an input unit 14, a display unit 15, and a memory unit 16 via a bus 12.

[00030] The communication I/F 13 is a wired or wireless communication interface for connection to the network N. The input unit 14 includes an input device such as a keyboard or a pointing device. The input unit 14 receives an operation input from an operator via the input device, and notifies the control unit 11 of a signal in accordance with the operation content. The display unit 15 includes a display device such as a liquid crystal display. The display unit 15 displays various types of information according to the control of the control unit 11.

[00031] The memory unit 16 includes a memory device such as a hard disk drive (HDD), or a solid state drive (SSD). The memory unit 16 stores various programs that are executed by the control unit 11 (CPU), setting up information, and the like.

[00032] The memory unit 16 stores a terminal information in which an address of the sales terminal 20 and a salesperson ID for identifying a salesperson (an employee) who operates the sales terminal 20 are stored in correlation with a terminal ID for identifying each sales terminal 20. The control unit 11 determines the address of the sales terminal 20 that is a transmission destination of various types of information by referring to the terminal information. The control unit 11 determines the salesperson (salesperson ID) from the terminal ID of the sales terminal 20, or determines the terminal ID of the sales terminal 20 from the salesperson by referring to the terminal information.

[00033] The memory unit 16 stores work management information for managing work. FIG. 3 is a diagram schematically illustrating an example data structure of the work management. As illustrated in FIG. 3, the work management information stores a work type, a workplace, and the request date and time in correlation with a work ID for identifying each work. In the "work type" field, the type of work that occurs in the store is registered. The work type includes, for example, work corresponding to a call from a customer (a salesperson call), work for replenishing a change machine with change (change replenishment), work for replenishing a POS terminal with receipt paper (receipt paper replenishment), and the like.

[00034] In the "workplace" field, a place where the work is performed, the identification information of the apparatus that is a target of the work, and the like are registered. The workplace includes, for example, an area name, identification information for identifying each cash register installed in the store (hereinafter, referred to as a cash register number), and the like. In the "request date and time" field, the date and time when the work is registered is stored.

[00035] The work management stores a response time, an assignment status, the number of respondents, a work time, and a work result in correlation with the work ID. These information items indicate a result of an operation that the salesperson performs during a period from the work request to the completion of the work. Specifically, in the "response time" field, the time from the work request to the first response is stored. In the "assignment status" field, the salesperson ID of the person to whom the work is assigned is stored. In the "number of respondents" field, the total number of the salespersons who respond to the work request is

stored. The “work time” field, the time from the determination of the assigned person to the completion of the work is stored. In the “work result” field, the execution result of the work is stored.

[00036] The work management stores reward points in correlation with the work ID or the salesperson ID in the “assignment status” field. In the “reward points” field, a points value that is given to the salesperson (salesperson ID) as a reward for the work is stored.

[00037] The memory unit 16 also stores a work information in which basic information of each work type is stored. FIG. 4 is a diagram schematically illustrating an example data structure of the work information. As illustrated in FIG. 4, the work information stores basic points, expected work time, and the like in correlation with each work type. In the “basic points” field, a reference value of the points that is given as a reward is stored. In the “expected work time” field, the expected time that is required to complete the work is stored. The basic points are preferably determined based on a predetermined evaluation criterion such as work importance or work load. It is preferable that the expected work time is determined based on the past actual value or the like.

[00038] The work management server 10 includes functional units that are implemented in the control unit 11 (CPU) configured by the program stored in the ROM or the memory unit 16. Specifically, as illustrated in FIG. 2, the functional units such as a work registration unit 111, a work request unit 112, a response receiving unit 113, a work assignment unit 114, a work status management unit 115, a reward giving unit 116, and an information providing unit 117 are realized on the RAM by executing the program by the control unit 11 (CPU). In one embodiment, the control unit 11 is a processor that is programmed to carryout the functions of the work registration unit 111, the work request unit 112, the response receiving unit 113, the work assignment unit 114, the work status management unit 115, the reward giving unit 116, and the information providing unit 117. In another embodiment, the control unit 11 is a hardware controller, e.g., an application specific integrated circuit (ASIC) and field programmable gate array (FPGA), that is configured to carry out the functions of the work registration unit 111, the work request unit 112, the response receiving unit 113, the work assignment unit 114, the work status management unit 115, the reward giving unit 116, and the information providing unit 117.

[00039] The work registration unit 111 is a functional unit that registers work as a request target in the work management index. Specifically, the work registration unit 111 registers the work type and the workplace of the work in the corresponding field of the work management. The work registration unit 111 registers the registration date and time of the work in the "request date and time" field of the work management. The work ID of the work management may be assigned by the work registration unit 111 or may be automatically assigned.

[00040] Here, the work type and the workplace may be manually input via the input unit 14 or the like, or may be input from an external apparatus. In the former case, for example, a salesperson who operates the work management server 10 inputs the work type and the workplace of the work that occurs in real time via the input unit 14, and thus the work is registered in the work management. In the latter case, the work type and the workplace of the work maybe spontaneously input by an external apparatus such as a cash register installed in the store. For example, when a salesperson call is performed in a self-service cash register, the cash register may automatically transmit the work type (salesperson call) and the workplace (cash register number) to the work management server 10.

[00041] Returning to FIG. 3, the response processing unit 213 is a functional unit that executes machine learning models implements response processing for the work request information. Specifically, when responding to the work request information is instructed, the response processing unit 213 transmits response information including the work ID of the work request information and the terminal ID of the sales terminal to the work management server 10.

[00042] When the information receiving unit 211 receives the assignment information, the response processing unit 213 cooperates with the display control unit 212 to cause the display unit 25 to display an assignment notification screen for notifying the reception of the assignment information. For example, the response processing unit 213 causes the display unit 25 to display a message indicating that the work is assigned together with the work request information of the work (work ID) instructed by the assignment information.

[00043] When the information receiving unit 211 receives the cancel information as a response to the response information, the response processing unit 213 cooperates with the display control unit 212 to cause the display unit 25 to display a notification screen for notifying the reception of the cancel information. For example, the response processing unit 213 causes the display unit 25 to display a message indicating that the work is canceled together with the work request information of the work (work ID) designated in the cancel information.

[00044] The response processing unit 213 deletes the work request information including the work ID instructed by the cancel information from the own sales terminal on condition that the cancel information is received from the work management server 10.

[00045] Next, operations of the work management server 10 and the sales terminal 20 will be described. FIG. 8 is a flowchart illustrating an example sequence of operations of work assignment that is executed by the work management server 10 and the sales terminal 20. In this processing, a case where the work request information, the assignment information, and the cancel information are transmitted from the work management server 10 is assumed.

[00046] First, the work request unit 112 waits until new work is registered in the work management by the work registration unit 111 (No in step S11). When new work is registered in the work management (Yes in step S11), the work request unit 112 transmits the work request information of the work to each of the sales terminals 20 (step S12).

[00047] Sequentially, the response receiving unit 113 waits for receiving a response (response information) from the sales terminal 20 for the work request information transmitted in step S12 during a predetermined receiving period (step S13). When the receiving period is ended, the work assignment unit 114 transmits the assignment information to the sales terminal 20 that first responds among the sales terminals 20 that respond (step S14). The work assignment unit 114 transmits the cancel information to the sales terminals 20 other than the sales terminal 20 to which the assignment information is transmitted in step S13 (step S15), and the processing is terminated. Instead of waiting for the end of the receiving period, the assignment information may be transmitted in advance to the sales terminal 20 that first responds.

[00048] On the other hand, in the sales terminal 20, the information receiving unit 211 waits for receiving the information that is transmitted from the work management server 10 (No in step S21). When the information is received from the work management server 10 (Yes in step S21), the information receiving unit 211 causes the notification unit 26 to notify the reception of the information (step S22).

[00049] For example, the display control unit 212 causes the display unit 25 to display the response screen G1 (refer to FIG. 6) or the response status screen G2 (refer to FIG. 7) according to an operation or the like via the input unit 24.

[00050] When the information received in step S21 is the work request information (Yes in step S23), the response processing unit 213 causes the display unit 25 to display the work request information (step S24). Next, the response processing unit 213 determines whether or not responding to the work request information displayed is instructed in step S24 (step S25). When responding is instructed (Yes in step S25), the response processing unit 213 transmits the response information to the work management server 10 (step S26). Next, the response processing unit 213 returns to step S21. When non-responding is instructed in step S25 (No in step S25), the response processing unit 213 returns to step S21.

[00051] When the information received in step S21 is the assignment information (No in step S23→Yes in step S27), the response processing unit 213 causes the display unit 25 to display an assignment notification screen for notifying the reception of the assignment information (step S28), and the process returns to step S21.

[00052] When the information received in step S21 is the cancel information (No in step S23→No in step S27), the response processing unit 213 causes the display unit 25 to display a cancel notification screen for notifying the reception of the cancel information (step S29). Next, the response processing unit 213 deletes the work request information instructed by the cancel information from the sales terminal (step S30), and the process returns to step S21.

[00053] While certain embodiment has been described, the embodiment has been presented by way of example only, and is not intended to limit the scope of the inventions. Indeed, the novel

embodiment described herein may be embodied in a variety of other forms; furthermore, various omissions, substitutions and changes in the form of the embodiment described herein may be made without departing from the spirit of the inventions. The accompanying claims and their equivalents are intended to cover such forms or modifications as would fall within the scope and spirit of the inventions.

[00054] For example, in the above-described embodiment, although the work that occurs in a store is set as an assignment target, the embodiment is not limited thereto, and the work that occurs in other fields or other environments may be set as an assignment target.

[00055] In the above-described embodiment, when non-responding is instructed by the sales terminal 20, although the configuration in which the non-response is not notified to the work management server 10 is used, the embodiment is not limited thereto, and a configuration in which the non-response is notified to the work management server 10 may be used. In this case, the response processing unit 213 of the sales terminal 20 may delete the corresponding work request information according to the instruction of the non-responding. The response receiving unit 113 of the work management server 10 may perform processing such as excluding the sales terminal 20 from the transmission target of the cancel information according to the notification for instructing the non-responding from the sales terminal 20.

[00056] These and other aspects of the embodiments herein will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following descriptions, while indicating the preferred embodiments and numerous specific details thereof, are given by way of an illustration and not of a limitation. Many changes and modifications may be made within the scope of the embodiments herein without departing from the spirit thereof, and the embodiments herein include all such modifications.

[00057] The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be

comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation. Therefore, while the embodiments herein have been described in terms of preferred embodiments, those skilled in the art will recognize that the embodiments herein can be practiced with modifications.

[00058] Although the embodiments herein are described with various specific embodiments, it will be obvious for a person skilled in the art to practice the embodiments herein with modifications.

I/WE CLAIM:

1. A system for determining employee productivity and motivation in real-time using machine learning models, wherein the system comprises:
   a communication module;
   a processor configured to control the communication module and storage to:
   transmit, to a plurality of terminal devices, work request data corresponding to the registered work request,
   receive, a response to the work request information,
   transmit, to one of the terminal apparatuses from which a response to the work request information was received,
   transmit, to the plurality of terminal apparatuses other than the designated terminal apparatus, a cancellation notification that cancels the work request using one or more machine learning models.

2. The system for determining employee productivity and motivation in real-time using machine learning models as claimed in claim 1, receive, from the designated terminal apparatus, a completion notification that indicates the work request is complete.

3. The system for determining employee productivity and motivation in real-time using machine learning models as claimed in claim 1,an estimated work time is stored in correlation with each of the plurality of work IDs,the processor is further configured to count an elapsed time between transmitting the work request information and receiving the completion notification.

4. The system for determining employee productivity and motivation in real-time using machine learning models as claimed in claim 1, wherein the processor is further configured to count an elapsed time between transmitting the work request information and receiving the response to the work request information.

5. The system for determining employee productivity and motivation in real-time using machine learning models as claimed in claim 1, wherein the processor is further

configured to determine a total number of received responses to the work request information.

6. The system for determining employee productivity and motivation in real-time using machine learning models as claimed in claim 1,when the completion notification is received, determine an amount of earned reward points based on the amount of reward points stored in correlation with the work ID of the work request.

ABSTRACT

METHOD AND SYSTEM FOR DETERMINING EMPLOYEE PRODUCTIVITY AND MOTIVATION IN REAL-TIME USING MACHINE LEARNING (ML) MODELS

The present invention provides an approach for determining employee productivity and motivation in real-time using machine learning (ML) models.In order to determine the employee productivity, the method and system provides a communication module, a processor configured to control the communication module and storage totransmit, to a plurality of terminal devices, work request data corresponding to the registered work request,receive, a response to the work request information. The method and system transmits to one of the terminal apparatuses from which a response to the work request information was received, transmit, to the plurality of terminal apparatuses other than the designated terminal apparatus, a cancellation notification that cancels the work request using one or more machine learning models.