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INCREASE THE EFFICIENCY OF PERSONNEL MONITORING BASED ON THE USE OF SOFTWARE*

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The article focuses on the importance of automating certain components of the HR management system in modern companies, in particular, on the need to introduce specialised software for monitoring the work of employees, which is due to the development of the latest digital HR technologies. The study examines the characteristics, advantages and disadvantages of using employee monitoring software by modern companies. The article presents proposals for the successful use of employee monitoring software tools, which requires taking into account various motives for implementing special monitoring programmes, compliance with ethical standards and legislation, and ensuring transparency and openness in relations with employees.

Keywords: employee monitoring, monitoring software, ethical norms and legislation, motives for implementing special monitoring programmes.

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ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ МОНІТОРИНГУ ПЕРСОНАЛУ НА ОСНОВІ ВИКОРИСТАННЯ ПРОГРАМНОГО ЗАБЕЗПЕЧЕННЯ*

[*] Відмова від відповідальності ("Фінансується Європейським Союзом. Погляди та думки, висловлені в публікації, належать виключно автору(ам) і не обов'язково відображають погляди та думки Європейського Союзу або [назва органу, що надав фінансування]. Ані Європейський Союз, ані орган, що надав грант, не несуть за них відповідальності").

Економічні умови в Україні та світі вимагають розробки нових організаційних форм, методів і підходів до ефективного управління підприємствами всіх галузей, автоматизації процесів управління та моніторингу персоналу. Сьогодні роботодавці мають різні мотиви для впровадження моніторингового програмного забезпечення. Серед основних причин — підвищення продуктивності, забезпечення безпеки даних, дотримання трудової дисципліни та запобігання шахрайству. Пандемія Covid-19 змусила багато компаній перейти на дистанційну роботу, що створило нові проблеми для управління та моніторингу персоналу. У такій ситуації програмне забезпечення для моніторингу стає ключовим інструментом для підтримки контролю та ефективності.

У статті акцентується увага на важливості автоматизації окремих складових системи управління персоналом в сучасних компаніях, зокрема на необхідності впровадження в їх практичну діяльність спеціалізованих програм для моніторингу роботи співробітників, що обумовлено розвитком новітніх цифрових HR-технологій. Розглянуто характеристики, акцентовано увагу на перевагах та недоліках використання сучасними компаніями програмного забезпечення для моніторингу співробітників. Представлено пропозиції щодо успішного використання інструментів програмного забезпечення моніторингу персоналу, зокрема урахування різних мотивів для впровадження спеціальних програм моніторингу, необхідності дотримання етичних норм і законодавства, забезпечення прозорості та відкритості у відносинах з працівниками.

Ключові слова: моніторинг співробітників, програмне забезпечення для моніторингу, етичні норми і законодавство, мотиви для впровадження спеціальних програм моніторингу.

PROBLEM STATEMENT

The economic conditions in Ukraine and the world require the development of new organisational forms, methods and approaches to effective management of enterprises in all industries, automation of management processes and personnel monitoring. Today, employers have different motives for implementing monitoring software. The main reasons include increasing productivity, ensuring data security, maintaining labour discipline, and preventing fraud. The Covid-19 pandemic has forced many companies to switch to remote work, which has created new challenges for managing and monitoring staff. In such a situation, monitoring software becomes a key tool to maintain control and efficiency.

ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

A number of studies have been devoted to solving the problems of implementing information solutions for monitoring employees to improve the efficiency of labour personnel, including the works of Azarova A.O. [1], Lyzanets A.H. [2], Kindii V.A., Paramud Y.S. [3], Mcallister N. [4], Poltavtseva A. [5], Tytenko L.V. [6], Uziialko A. [7], Flynn J. [8] etc. In today's world, where cyberattacks are becoming an increasing threat and accountability in the workplace is critical, many companies are resorting to the use of employee monitoring tools. Therefore, the issue of choosing the optimal software solution for monitoring employees in the context of the emergence of new alternative forms of employment, the impact of external factors and challenges, digitalisation processes, etc. requires further research.

The purpose of the study is to investigate the peculiarities of using personnel monitoring software at modern enterprises.

MAIN RESULTS OF THE STUDY

The economic literature defines employee monitoring as a process that employers use to track employee performance data to optimise individual productivity and notes [9; 10]. Tracking employee progress can help motivate their engagement, minimise negative aspects and increase company profits. Software monitoring tools have a positive impact on all aspects of companies' operations, including productivity and safety. Thanks to the functions that allow tracking the activities of employees, a business owner can ensure the productivity of their teams [3]. At the stage of modern development of the latest digital technologies in personnel management, there are ready-made specialised programmes for monitoring the work of employees that differ in functionality, interface and other characteristics. Therefore, it is important for companies to choose the optimal software solution that meets their goals, specific needs and challenges, takes into account the specifics of HR policy, staff performance monitoring, performance evaluation methods, and can become an effective tool for increasing productivity and data protection. Such specialised programmes provide an opportunity to evaluate employee productivity, record violations, prevent data leaks and corporate fraud, etc.

Investments in such systems are reasonable and necessary for the further successful development of companies. The most common software in practical use by domestic and foreign companies includes Clevercontrol, Spyrix, Hubstaff, SentryPC, InterGuard, Teramind, Veriato, Work Examiner, pcTattletale, ActivTrak, BambooHR, Controlio, DeskTime, Yaware Timetracker, Securetower, Lanagent, Mipko employee monitor, Staffcop, Staffcounter, Monitask etc. (Table 1).

The CleverControl application is effectively used as a cloud-based solution for remote staff monitoring. With CleverControl, you can monitor employees' computer screens in real time from anywhere in the world. The search query tracker shows which applications employees open and which sites they visit. The application allows you to record sound, video and keyboard keystrokes, as well as take screenshots. In addition, the application records the use of a printer, flash drive and other devices, which prevents leakage of internal corporate information. The application runs on employees' computers in a hidden mode.

Spyrix employee monitoring software is characterised by a wide range of features. The most important feature is the ability to monitor in real time, including tracking the employee's screenshot history, activity in applications, and interaction with social networks (including Facebook Messenger, WhatsApp). There is a live screen view and screen recording feature. Although the software is paid, it is possible to test drive it by trying the free trial version.

Hubstaff is suitable for tracking, improving employee productivity, setting regular productivity goals, and tracking the progress made towards those goals. It also offers features such as smart GPS tracking, which allows you to manage your team more effectively, especially those who work remotely. In addition, there are also timesheets and automated payroll functions.

The SentryPC app is a cloud-based computer monitoring tool that is suitable for filtering content, ensuring that employees are free from any distractions while working and increasing productivity. With the screenshot feature, you can track user activity, such as interactions with websites and applications. SentryPC USB drive detection is ideal for managers who don't want to spend a lot of money on employee software but still want to take advantage of the technology's key benefits.

The InterGuard application does an excellent job of tracking activities on employees' computers, laptops, tablets and phones, sending comprehensive reports on online activity to the employer. The system's management allows you to group employees into different groups for seamless tracking. The dashboard also provides information on who was the most productive and who was the least. In addition, you can develop certain unique alerts that can be used to assign different levels of threat and risk. High customer focus of the tool.

The Teramind app provides protection against all types of security threats by analysing employee online behaviour and interactions with other employees, websites, applications, social networks, files, online searches, and print. There is a tracking app, including attendance, real-time alerts and productivity levels, as well as a video recording feature that more broadly identifies insider threats and online abuse.

Table 1

Modern employee monitoring software [11-16]

Software	Pros	Cons
Clevercontrol	Comprehensive online activity reports Easy to install and operate Real-time monitoring through the web account Recording of social media activity	It may take a while to get used to using the product
Spyrix	Cloud-based operations Easy data recording and storage Tracking of visited sites, keystrokes, etc. Monitoring of social media activity View in real time	Rather short trial period
Hubstaff	Accurate time tracking Increase employee productivity Ingenious GPS tracking system Quick setup	High price of the software product (in comparison with other specialised programmes)
SentryPC	Content filtering Thorough tracking of online interactions USB drive detection Low-cost services	Limited customer support
InterGuard	Detailed reporting 24/7 live chat support Helps to increase productivity Uninterrupted operation	Complex pricing structure
Teramind	Real-time alerts Prevent information risks Tracking online interactions Manage employee productivity	Does not allow monitoring of company-owned mobile phones
Veriato	Wide range of monitoring tools Integrated AI software Efficient stand registration procedure Quick detection of threats	Comprehensive setup
Work Examiner	Attendance of employees Real-time tracking Filtering function Tracking all online activities	Work Examiner doesn't offer many advanced features (compared to other specialised apps)
pcTattletale	Remote monitoring with any gadget Quick setup Records all types of web activity Screen recording	High price of the software product (compared to other specialised apps)
ActivTrak	Free demo version Simplified control over employees Customisable operations Easy to navigate	Does not have a keystroke function
BambooHR	Comprehensive human resource management functions Ideal for small and medium-sized companies Applicant tracking system Onboarding tools	The mobile application needs to be improved in the context of modern digitalisation processes
Controlio	Increases security threats Screen recording function Monitors employee behaviour and team productivity Free trial version available	Limited services during the free trial period
DeskTime	Time tracking Easy to use Productivity Activity tracking	Compatibility issues
Yaware Timetracker	Real-time process tracking Flexible settings Automatic time tracking and payroll calculation Determination of employee performance	Does not support multitasking

Veriato's software solution is best suited for employees who are concerned about data breaches. The integrated AI software follows a five-step process: Observe, Analyse, Alert, Detect, and Respond, enabling risk elements to be identified and acted upon almost immediately before damage is done. Employees' online activity across the entire spectrum of the web is analysed to identify any threats or anomalies. If something is detected, Cerebral Security issues an alert, after which corrective action can be taken.

The Work Examiner app is special because its functions are divided into three subsections: web surveillance, Internet usage control, and time tracking. The system can also provide a filtering function. In addition to tracking web activity, you can also monitor employee interactions on social media.

The pcTattletale app is used as a sophisticated spy tracking system that offers dual technology of employee monitoring and control. The ability for an employer to scrutinise keyboard entries, or to track internet activity, or to monitor instant messaging. Tracking employee productivity statistics and attendance.

ActivTrak cloud-based software is equipped with all the features you need to track employee behaviour, productivity levels, goals, and workload balance. The system's comprehensive analytics allow you to track various details and constantly monitor employee activity. Unique features include audit trails, USB activity monitoring, and risk assessments that identify employees at high risk of losing confidential information or data leakage.

BambooHR software is aimed at small and medium-sized businesses. The availability of a candidate tracking and performance management system is one of the advantages of this service. BambooHR is equipped not only with employee monitoring functions, but also with HR management functions such as recruitment, appraisal, etc.

The Controlio app uses web filtering, which allows employers to decide what employees can and cannot access. In the event of any malicious activity, the screen recording function can be used to provide evidence of the offence, which increases data and network security [11-16].

Yaware TimeTracker is a service that helps department managers and company executives evaluate the productivity of employees and monitor freelancers. The system can be installed on a PC or run online. The main feature of this system is the automatic accounting of working time use by monitoring the use of software, analysing the time spent by employees at the workplace and the use of websites (including social networks). In addition, the platform can receive and store screenshots and webcam images when the administrator is offline. The 'TaskTracker' function allows managers to quickly create and control the process of completing tasks, and the employee to quickly receive new tasks with the ability to change their status and leave comments [14; 15].

DeskTime is a desktop and mobile time tracking application for companies and freelancers. Its implementation makes it easier to measure productivity, increase productivity, track attendance, and effectively manage workflow. With DeskTime, managers and team members can always know who is doing what and track the overall progress of the team. DeskTime features include: fully automatic online and offline time tracking; project management; shift and absence planning; additional screenshots; custom reports, etc. [4; 16].

The introduction of effective employee monitoring has a long precedent in management practice, and scholars' views on modern management approaches to strengthening or slowing down employee control are debatable. Therefore, the advantages and disadvantages of employee monitoring should be carefully weighed and distinguished in the context of a particular company. In particular, it is important that such systems are used ethically, with respect for employee rights and in accordance with the law [17-19]. Failure to comply with these principles can lead to legal consequences and damage to the company's reputation.

Properly implemented employee monitoring software allows you to identify weaknesses in work processes and improve them. Employees, knowing that their activities are being monitored, can focus on their work and increase their productivity; managers can analyse working models and implement changes that make processes more efficient. This includes identifying redundant or excessively time-consuming tasks and optimising them; prevent confidential information leakage and corporate fraud. Tracking the use of external devices, such as flash drives or printers, can prevent unauthorised copying of data.

It is important to consider the potential harm of employee monitoring software, in particular:

Excessive monitoring may be perceived by employees as an invasion of their privacy, which can lead to lower morale and increased stress levels. This, in turn, can have a negative impact on productivity;

Total surveillance can reduce the level of trust between employees and management. If employees feel that they are being monitored excessively, they may become less loyal to the company [10; 20].

If companies decide to implement employee monitoring, it is important to involve employees in the process. Statistics show that employee monitoring is more successful when employees are aware of the process and accept it. Ensuring that employees are well informed can change a negative workplace atmosphere into a more positive and productive one [8].

CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

Like any other business tool, employee monitoring programmes can bring both benefits and harm to a company. If implemented competently and transparently, listening to the opinions of employees and using the data obtained for the benefit of the company, the entire team will benefit. However, total surveillance can lead to negative consequences. Therefore, it is important to approach this issue responsibly, adhering to ethical standards and legislation, ensuring transparency and openness in relations with employees. Only then will the implementation of such software solutions be justified and beneficial for all parties. In the context of the emergence of new forms of employment, additional research and deeper analysis are required to address the use of monitoring software that allows business owners to check on their remote workers.

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