The Use of Information (Distance) Technologies in the Process of Hospitality Industry Professional Training under COVID19 Pandemic Conditions in the Southern Region of Russia

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Abstract
The article identifies recommendations for the use of information (distance) technologies in the process of hospitality industry professional training in the context of the Covid 19 pandemic in the southern region of the Russian Federation. Considered are the performance capabilities of the Moodle 3+ platform in the hospitality industry professional training. In the context of telecommuting in the hospitality industry, special attention is paid to specialists' efficiency and information security. Highlighted are the performance capabilities of StaffCop Enterprise in monitoring the hospitality industry specialists' distance work.

Keywords [1]
Information, technology, development of a video course for the discipline, methodology for presenting lecture material, information security, distance work, monitoring.

1. Introduction

The use of information (distance) technologies in the process of hospitality industry professional training in the southern region of the Russian Federation during the Covid 19 pandemic have become particularly relevant. This situation is associated with the need to ensure distance interaction within the educational process. At the same time, it should be noted that the requirements for the level of professional training on the part of the hospitality industry enterprises in the region remain unchanged, since it is obvious that the current unfavorable situation will be over in the foreseeable future. Under the current conditions, educational institutions face the need to develop, adapt and apply informational distance educational technologies, which, on the one hand, can provide professional training at the required level in accordance with employers' requests, and on the other hand, ensure the quality of the educational process based on existing educational standards.

2. Purpose and objectives of the research

The purpose of the research is to work out recommendations on the use of information (distance) technologies in the process of hospitality industry professional training in the context of the Covid 19 pandemic.
Research objectives are as follows:
- analyzing the use of distance learning technologies in hospitality industry professional training in the context of the Covid 19 pandemic;
- using tools for analyzing StaffCop Enterprise events and information in the hospitality industry.

3. Literature review

The provisions of state regulation in the area are considered in the sources [1; 2] within the framework of the analysis of the existing requirements for the organizational aspects of information technologies used in the Russian Federation. The analysis of the use of distance technologies in the educational process has been carried out on the basis of the following sources (Chetyrbok, 2019; Kazak, Chetyrbok, Oleinikov, 2020). When studying the organization of hospitality industry professional training, the authors were guided by the following works: Bagiev, Tarasevich, 2017; Agrova, 2015; Zubova, 2020; Kutuzov, Tatarnikova, Tsekhanovsky, 2020; Olifer, N., Olifer V., 2016; Yurchik, Golubkova, 2018; Kazak, Lukyanova, Chetyrbok, 2018; Chetyrbok, Dzhulay, 2018; Shostak, 2020. In order to analyze how the distance mode of hospitality industry professional training is controlled and how information security is ensured, the following sources were considered: Voronin, Davydov, 2016; Kertov, Boliev, Shogenov, Zhilokov, Kucherova, 2017; Novikov, Kondratenko, 2016; Tarasov, Bakhareva, Malakhov , Ushakov, 2019; Sergeev, 2016; Tengaykin, 2020; Tumbinskaya, Petrovsky, 2020.

4. Methodology

In the context of the Covid 19 pandemic, it is most rational to use distance learning methodology on the Moodle 3+ platform in the process of hospitality industry training, since it provides for distance online courses within the framework of hospitality industry specialists' distance work.

5. Results

Nowadays, the use of information (distance learning) technologies in the process of hospitality industry professional training is especially relevant in the context of the Covid 19 pandemic in the southern region of the Russian Federation.

Information technology in distance education is divided into three groups:

1. Technologies of presentation;

2. Technologies of storage and processing;

3. Technologies for the transmission of educational information.

The combination of these groups forms the technology of distance learning. Let us consider the possibilities of distance learning based on the Moodle 3+ e-course management system. The main teaching unit of Moodle 3+ is the curriculum. Such a course allows for the following activities:

1. Student – student and student – teacher interaction. Such elements as forums and chats prove helpful.

2. Transfer of knowledge in electronic form using files, archives, web pages and lectures.

3. Testing knowledge and learning with tests and assignments. Students can send the results of the accomplished work in the form of texts or files.

4. Students' educational and research co-working on a specific topic, using built-in wiki mechanisms, seminars and forums.

The Moodle 3+ system provides for the following:

- choosing time and place for training, which is convenient both for teachers and students;

- strong knowledge acquisition;

- teacher – student contact when it is needed;

- individualization of training.

The educational process of distance learning includes all the main forms of the standard organization of the educational process: laboratory practice, lectures, tutorials and seminars, the supervision system and students' individual and research work.

Lecture is the main organizational form of training aimed at the primary knowledge acquisition.

If video lectures are used, then teachers' lectures are recorded using electronic media. It can be supplemented by various editing methods with multimedia applications illustrating the presentation of lectures. Such additions serve not only to enrich the content of lectures, but also to make its presentation more lively, understandable and attractive for students.

Students' individual work is an integral part of any form of study. Thanks to distance learning technologies, students deal with lecture materials using interactive computer training programs for multimedia lectures.

Academic performance rating conducted by teachers is one of the main forms of organizing the educational process. In the distance learning system, almost all possible organizational forms of control are used, supplemented by specially developed computer programs allowing removing part of the workload from teachers and increasing the effectiveness and timeliness of control. Thus, the use of new educational technologies makes it possible to carry out such types of control: current, thematic, midterm and final.

Students' research work in the full-time education format, as a rule, consists in conducting scientific student conferences, seminars, writing theses, term papers and projects, as well as implementing educational research assignments. The distance learning system implies the use of a variety of pedagogical technologies that will make it possible to implement game, research and creative forms of project pedagogical activity which forms the basis of students' research work. The Moodle Learning Management System is a management system specifically designed to create high-quality online courses. In terms of the provided capabilities, Moodle is comparable to well-known commercial distance learning systems. At the same time, this system has an obvious advantage over them as it is distributed in the open source code, which makes it possible to customize the system for the specific features of a certain educational project, and, if necessary, build new modules into it.

Great communication possibilities belong to Moodle's greatest strengths. The system supports exchanging files of any format (both between teachers and students and among students themselves). The mailing service allows promptly informing all course participants or individual groups about current events.

An important feature of Moodle is that the system creates and stores each student's portfolio: all the submitted assignments, all the teacher's grades and comments to the accomplished tasks and all the messages in the forum.

Teachers can create and use any grading system within their courses. All grades for each course are stored in a summary sheet. It allows controlling the "attendance", students' activity and the time they spend on their academic tasks in the network.

The modular structure of the system makes the system easy to use for students and teachers.

The presence of an open community, consisting of more than 50,000 system users and more than 3,000 implemented distance learning systems around the world allows for effective experience exchange.

According to numerous studies of various software platforms' capabilities, the Moodle system turned out to be the sole leader. It should be noted that, given the continuous improvement of all systems, Moodle occupies a leading position nowadays.

One of the most important competencies managers in the hospitality industry should possess is to productively and safely use the information resources of the companies they work at.

StaffCop Enterprise is a powerful set of tools for analyzing events and information, which allows assessing and monitoring managers' efficiency when they use computers, quickly and accurately investigating information security incidents within the enterprise, and also solving a wide range of tasks related to information security analytics.

The StaffCop monitoring agent, like its service, disguises itself as system processes and services, which names do not give a hint that these elements are responsible for monitoring.

The information collected by the monitoring agent is stored on the computers where the monitoring agent is installed. It is encrypted and not available for free viewing.

With the help of StaffCop information security tools, the network administrator and the head of the enterprise will be able to control events in their managers' computers (both in the local and distance networks), as well as all data transmission channels:

- Web mail services and social networks (mail.ru, yandex.ru, gmail.com, VK, FB, Odnoklassniki, LinkedIn, etc.).

- Mail protocols (SMTP / SMTPs, IMAP, POP3 / POP3s, MS Exchange).

- Internet messengers (Skype, ICQ, QIP, Jabber (XMPP), Mail.ru Agent, Yahoo and others).

- Transfer of hypertext information and files (HTTP / HTTPs, FTP / FTPs).

- Shadow file copying (from e-mails and removable media transmitted via the Internet and sent to print).

- USB ports (control and blocking).

The reports also provide information on USB usage in the form of a "USBCachedFiles" folder. The subdirectories contain copies of files copied to and from USB devices.

Data graphs help visualize anomalies in managers' behavioral analysis.

StaffCop Enterprise is based on the OLAP complex multidimensional data analysis technology allowing creating multidimensional reports on-the-fly and processing huge amounts of data within seconds.

The applied technology makes it possible to establish a correlation between the data collected by agents on endpoints in a few clicks.

The most illustrative example of plotting a graph is a line graph of the number of events for copying files to removable media. It is very easy to do (specify the time interval and limit the data set by the dimensions "copy operation", "disk type: Removable" and select the "Linear graph" display type in the report designer (figure 1).
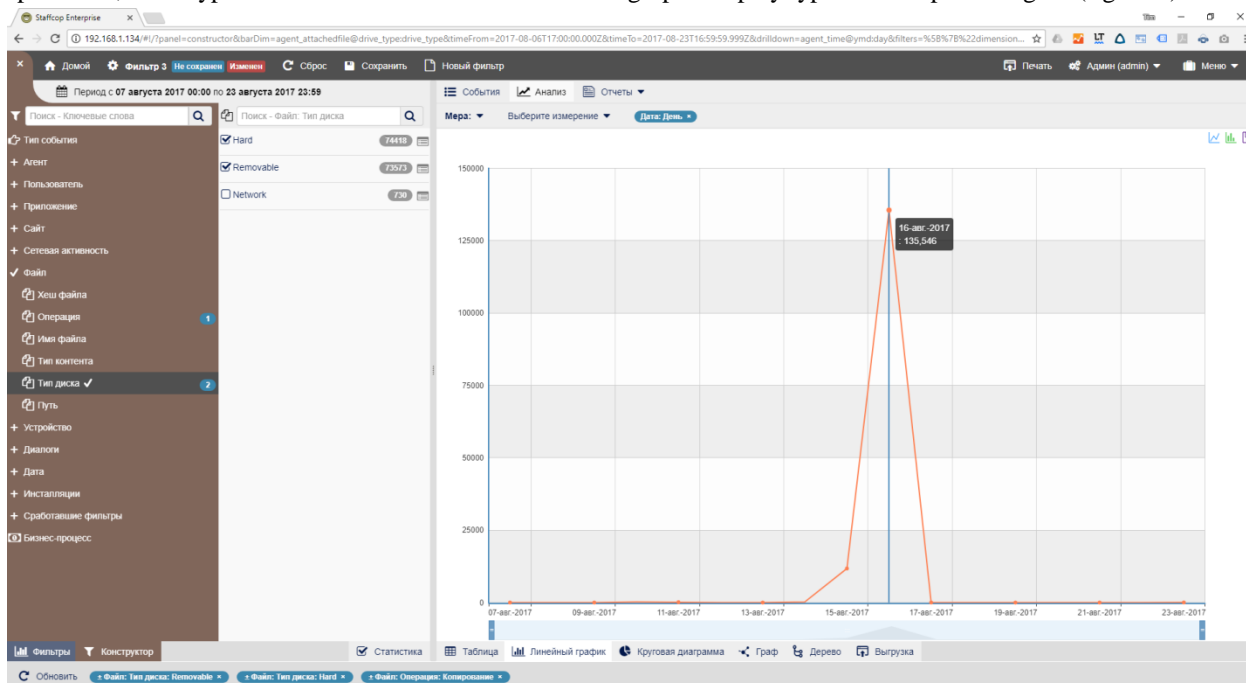
Figure 1: Line graph of the number of file copy events

To an unaided eye, it is obvious that the facts of copying files significantly exceed the average on one of the days. By clicking on the top of the chart, one can go to the list of all copy operations of that day. To study the data in close-up, one can simply click on the correspondent graph node. Figure 2 shows the obtained data about every manager in the form of a bar graph.
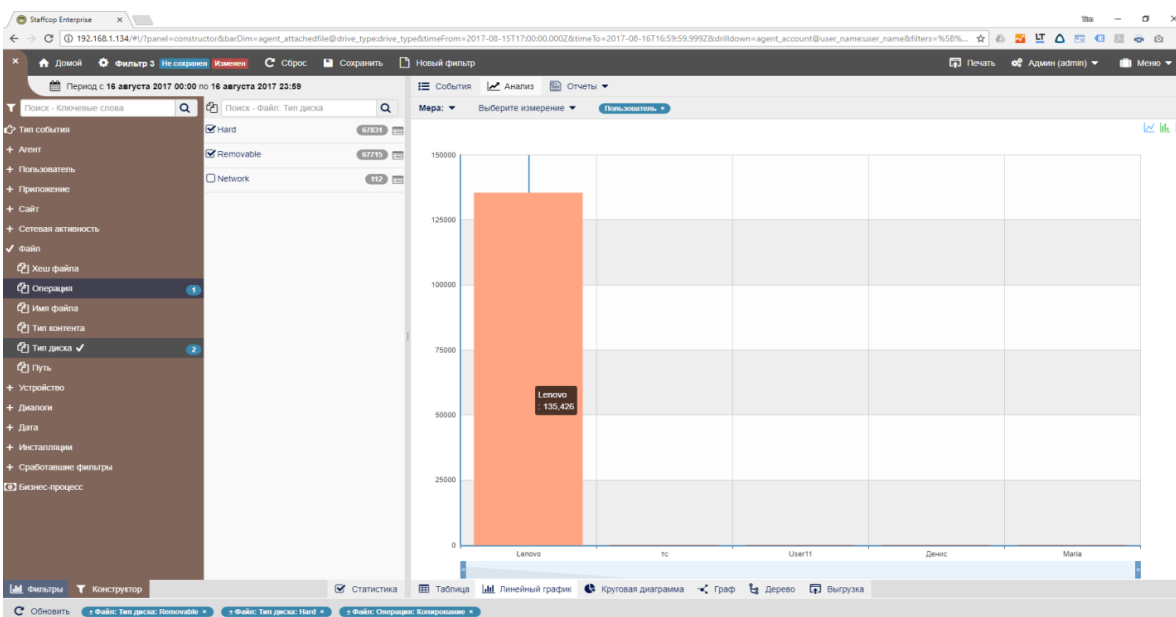
Figure 2: Data drilldown: a bar graph

A noteworthy detail is that all graphs and tables have their own constructor for quick detailing and data refinement.

In order to simplify security officers' analyzing managers' actions and identifying any deviations, an automatic anomaly detector is implemented in StaffCop. It analyzes managers' behavior over a selected period of time and shows deviations from the regular behavior format (figure 3).
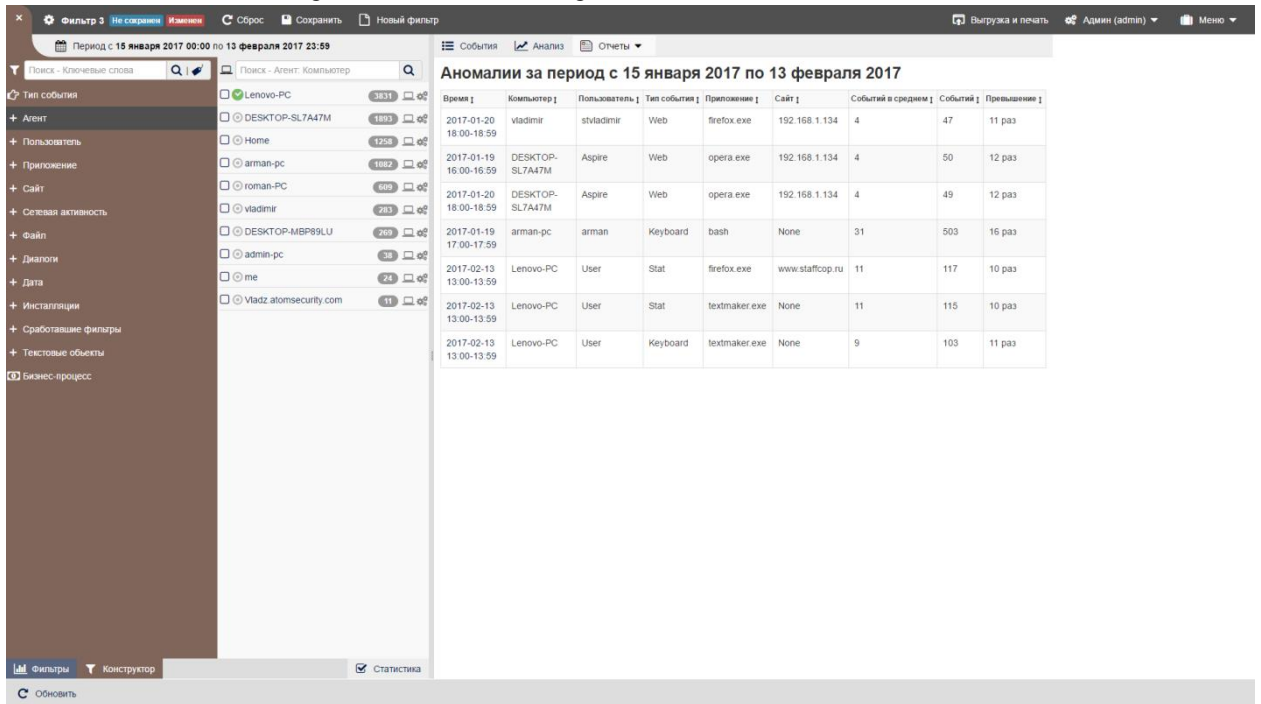

Figure 3: Automatic anomaly detector in StaffCop Enterprise

For instance, every manager uses the same applications approximately the same number of times every day. If the number of operations is in large excess over the standard value, then StaffCop Enterprise considers such an event as abnormal behavior, which may be a potential threat.

It is also possible to connect to the manager's desktop. This can be done directly from the administrator's console in the browser and, if necessary, one can take control over the manager's computer (figure 4).
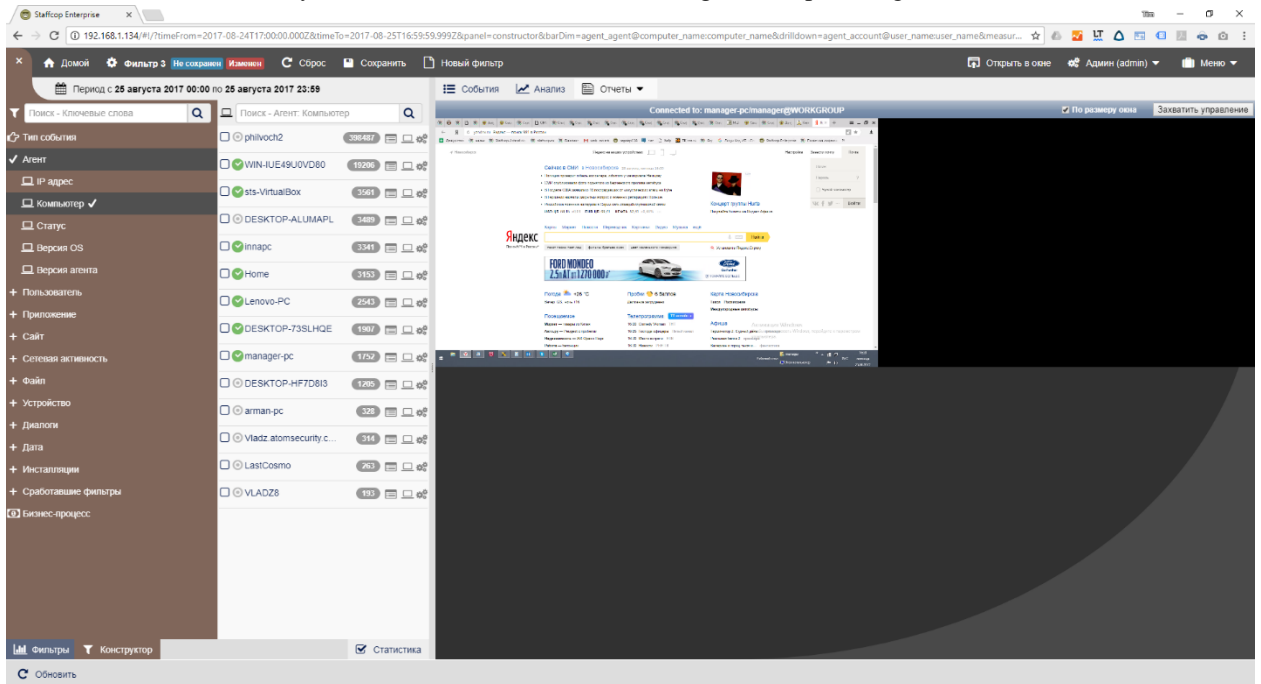

Figure 4: Remote connection to a company manager's desktop

Thus, the agent program is launched on workstations or terminal servers with the Windows operating system. It monitors managers' actions and events on their computers, transfers them to the server and also implements blocking and access denials. StaffCop Enterprise agent can run on a remote computer which is not in the enterprise's local network. Using this tool, one can quickly and efficiently find atypical activity of managers or programs. Such actions apply to almost any kind of event. Dangerous actions most often occur during spontaneous activation: addressing personal mail; network activity of applications; connection of removable USB-devices: flash drives, phones, etc.; using a printer; activity outside the normal working hours.

6. Discussion

The use of distance technologies in the educational process was discussed at the 4th All-Russian Scientific and Practical Conference (with international participation) on Distance Educational Technologies - 2019 (Chetyrbok, 2019).

7. Conclusion

Nowadays, the use of information technologies in the process of hospitality industry professional training in the context of the Covid 19 pandemic in the Southern region of the Russian Federation is especially relevant. In the article, the authors have discussed the possibilities of distance learning based on the Moodle 3+ e-course management system and developed recommendations for its use in the process of hospitality industry professional training under the Covid 19 pandemic conditions.

Under the conditions of distance work in the hospitality industry, particular attention is paid to specialists' productivity and information security. StaffCop Enterprise is a powerful set of tools for analyzing events and information, which allows evaluating and monitoring managers' productivity while using computers, quickly and accurately investigating information security incidents within the enterprise, and also solving a wide range of tasks related to information security analytics.

8. References

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