

Article

# An Impact Study on the Use of Telework during Covid-19 Pandemics

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**Abstract.** In the context of the pandemic caused by Covid-19, an important aspect that was affected and changed was the way people communicate. Communication efficiency can be improved by using modern technologies, for example: mobile devices, digital audio and video platforms, text platforms, social media and more. For further economic success, digital skills are needed not only for executives, but also for managers, in order to be able to lead teams and avoid situations of stress and tension in the virtual environment. This scientific paper includes a primary research of how the pandemic affected the communication at the workplace. For this a qualitative analysis was first performed, in which the interview was used as a working tool. Next, on the basis of a questionnaire, a hypothesis was formulated and validated afterwards through multiple linear regression. This research highlighted the particularly important role of communication and, in this context, the role of the remote team leader. In order to keep the team motivated and interested in the virtual environment, the manager must use modern tools to motivate, support and express his appreciation when the team, respectively the members of his team, achieve their goals successfully.

**Keywords:** Management; telework; communication; human resource management; business; digitalization; Covid-19 pandemic

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## Introduction

Communication efficiency within organizations is a very important and often discussed issue. The scientific literature emphasizes that 75% of the time spent by members of an organization is dedicated to interpersonal communication (Wertheim, 2008).

In the context of the pandemic caused by Covid-19, an important aspect that was affected and changed was the way people communicate. In particular, communication in the professional environment has gone from a direct communication to a communication in the virtual environment. Thus, citizens around the world have been directly or indirectly affected by the change in the way they carry out their professional activity (Rump & Eilers, 2020). Organizations were also affected, because until the onset of this pandemic, there was not an issue to have enough staff prepared to intervene in the long term and in large enough numbers to eliminate the negative effects of a crisis. All employees of various organizations around the world were thus subjected to this ongoing test (van Fenema, P. C., Romme, A. G. L., 2020).

Telework, a way of doing business known for over 20 years, has become a common practice with the advent of the pandemic (Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., Zimmermann, Z., 2020). Before the pandemic, more innovative companies planned to use smart working, which can take place both in standard workspaces and in virtual workspaces. The working tools for smart working and teleworking are the same, respectively those used by employees from the onset of the pandemic to the present day (Menshikova, 2020).

Even if not all areas of activity of the economy were affected to the same extent, companies, without exception, had to adapt to a new situation (Butler, 2020).

## 1. Literature review

### 1.1. Communication and communication efficiency

In the modern era, communication is an essential element in the life of each human being and of each organisation. The word "communication" has its origin in Latin and actually means "to share". Thus, communication is the act of transmitting a message from an individual or group of individuals to one or more individuals using signs, symbols and semiotic rules known to both parties. Communication channels can be: visual, audio, olfactory, electromagnetic, haptic or biochemical. Nonverbal communication is the process by which a message is transmitted without the use of verbal expression. Nonverbal communication includes: factual communication, gestures, body language, facial expression, eye expression, etc. Nonverbal communication demonstrates one of Paul Watzlawick's laws, which tells us that "an individual cannot not communicate" (Watzlawick, Beavin, & Jackson, 1967).

Verbal communication refers to the transmission of a message in written or oral form. Para-verbal communication is expressed through inarticulate sounds, timbre, intensity and inflection of the voice, emphasis on words, tone, pauses used in expression, sound intensity, etc. This mode of communication supports the understanding of the message, giving it additional nuances and meanings. In this way the messages can be strengthened, contradicted, distorted or replaced (Keenan, 2002).

In organisations, when we talk about the coordination function, we must recognise that its main component is communication. Organizational communication is defined as the process by which messages are exchanged in order to achieve the individual and common goals of the members of that organisation. Management functions cannot be performed without communication. Thus, there is no question of whether or not managers engage in the process of communication and whether they communicate well or not. One of the components of the communication process is the context or environment in which the communication takes place. This refers to space, time, mental state, audio and video interference and temperature, which can distract or cause interruptions or distortions in the communication process between sender and receiver. Another important element are the technical means of communication. These are the technical ways of the communication process. Depending on the means of communication used, the accuracy of the message transmitted, the speed and the cost of communication are determined. With the transition to remote work, individuals no longer communicate face to face. The means of communication and its context have been moved to the virtual space (Pereteatcu, 2019).

Communication is the key to organisational success and efficiency (Gruning, 1992). For a message to be received correctly, it is important to listen to the other person with openness and empathy, to judge the content and not the sender, and to ask for enough details and then to paraphrase what I heard to make sure I understood it correctly. A manager has an even more difficult role, being in the position of authority, he must show interest in the topics presented and his body language needs to be appropriate in order to gain confidence and transmit information openly. The manager also has the duty to express his opinion, not only with openness, but also with empathy, communicating his own feelings and emotions openly (Wertheim, 2008).

Communication efficiency means that the message is delivered quickly, in a way that allows the receiver to hear it, interpret and make use of it as intended by the transmitter. It is defined also, as a process of exchanging ideas, thoughts, knowledge and information, in which the purpose and intention are transmitted in the most appropriate way possible. In other words, it is the process in which the sender presents his point of view in the way that it can be best understood by the receiver. Efficiency is hereby a measure of the extent to which the message is well transmitted, understood and used for solving an intended task (Prachi, 2018).

Any organization needs communication efficiency in order to emphasize competitive advantage, define identity, position itself in the market and gain the desired competitive advantage. For this, all managers must be prepared and develop their communication skills, both inside and outside the organization, to ensure its success (Iacob & Badina, 2017).

Nowadays, information has proven to be a very important element both in the social and economic contexts. The information and communication technology has developed a lot in recent years. The innovations brought by the fourth industrial

revolution give us new opportunities and at the same time require us to collect and process a very large amount of data and information (Faloba & Muscalu, 2018).

## 1.2. Communication in the context of the pandemic

Crises occur at different times and have different intensities. In the case of the crisis caused by Covid-19, it resulted in great insecurity, major stress and anxiety, which led the population to a tunnel-type vision, oriented mainly towards the present and less towards the future (Mendy, Stewart, & VanAkin, 2020). Ethical behavior in business is more relevant in a time of crisis as all organizations face a new situation full of the unknown and risks (Gurău, 2020).

As this is a pandemic that has affected the entire planet, governments around the world have had to take various measures to prevent the spread of the virus and protect the health of citizens (Fritsche, J. Ph., Harms, P. Ch., 2020). In the case of Dubai, the government decided to implement a five-step plan of action, namely: the initial implementation of remote work for everyone, the granting of paid leave, then the granting of unpaid leave, followed by a temporary reduction in all wages, followed by the organization of unlimited salary reductions (Haak-Saheem, 2020).

In crisis situations, in which employees and managers are concerned and worried, communication is a very important element in order to maintain a state of balance within the organization. A correct communication requires the recognition of the limits and personal mistakes of each member of the team, but especially of the manager. The manager must communicate in a way that everyone can understand and involve the team in the decisions that are to be made (Sandman & Lanard, 2020). In communicating, we face a series of barriers, either physical, semantic or psychosocial (Lunenborg, 2010).

Communication efficiency can be improved by using modern technologies. These technologies are for example: smartphones, email, text platforms, social media and more (Sharma & Sharma, 2015).

In the current context of the pandemic, the use of modern communication technologies, both privately and in the business environment, has become the only solution. For those who are experienced and have advanced digital skills, but are perhaps shyer and less accustomed to public speaking, this is a great advantage. The new generation communicates a lot in the virtual environment, which is why the changes that occurred did not affect them in carrying out their professional activities to the same extent that the older generations were affected. Communication is the essential attribute of the human being. No human activity, regardless of its importance, is carried out without communication (Iacob & Badina, 2017).

Crisis communication can be briefly presented in three steps: the uniqueness of the source of presenting the truth is ensured, then a clear, simple, as humane and very accurate communication is used and the topics and statements made by the manager must be checked beforehand to ensure compliance with reality (Koh, 2020).

In the case of direct communication, in addition to the content we transmit, our message is supported or refuted by our body language, facial expressions and gestures. There are considerable differences between how a woman communicates compared to a man (Khemesh, 2017). However, regardless of the age, gender and culture of a particular person, in the case of virtual communication we refer and focus mainly on the content of the message transmitted.

The pandemic caused by the Covid-19 virus has accelerated the implementation of digitalisation worldwide. The digital revolution involves drastic changes in business models and methods for gaining added value in business. New technologies such as big data analytics, social media, cloud computing, mobile computing, the Internet of things and intelligent robots are the engines of current development. Digitalisation has had unfavorable consequences for many companies and industries. Trying to have an exclusive analog business in the future can be the least possible viable option. Companies benefit from digitalisation by creating new business models and new markets, with added value through innovation, new forms of decision-making and, in particular, new forms of employment (Urbach & Ahlemann, 2019). The companies that are being set up today are orienting their business model towards the use of tools offered by digitalisation. This is due to the fact that about half of the world's population

has access to the internet. Thus, the vast majority of customers targeted by a company, access the Internet for information exchange, communication with friends, reading news and much more (Zöller, 2019).

In the context of the current crisis, digital technologies have been the only way to communicate and carry out the professional activity of many companies. Many companies did not have their own platforms to use to achieve their goals. In addition, the use of online platforms requires, for a good part of the employees, the existence of a training. In addition to free online platforms, companies have had the opportunity to buy or create customized platforms. Even if in the first phase, simple emergency solutions were used, in the second phase the companies considered staff training and the improvement of communication tools (PWC, 2020).

### **1.3. Communication skills in the digital era**

Lately, in the scientific literature and in general, the term digitisation is used very often, without having until now a clear definition. In a narrow sense, digitisation means nothing more than the transcription of data from analog to digital. Regarding the moment when the digitisation started, the scientific literature presents different moments. Regardless of the historical moment in which we place the beginning of digitisation, whether it was the change of Arabic numerals in the binary system by Gottfried Wilhelm Leibnitz or the development of the first telegraph in 1833 by Samuel Morse or the development of the first computer in the 1960s, this is not a phenomenon of modern times (Harwardt, 2019).

The digitization of data from the analog system leads to lower production and multiplication costs, making them transmissible worldwide in seconds, easy to process by robots and easy to evaluate with the support of machines (Kröhling, 2017). The digital economy accounts for around 8% of the world's gross domestic product of the world's top 20 economies. This shows the role that the digital economy plays in developed countries. It is difficult for scientists to define the digital economy due to its multidimensional nature. The digital economy goes beyond the simple notion of the digital sector, which refers to products and services resulting mainly from the use of digital technologies (Zaramenskikh, E.; Fedorova, A., 2020).

Organizations today are facing the task of redefining the way they work and, in some cases, even their mission and vision. This is a complex and difficult process that can only be achieved with the direct support and involvement of the people employed in that organization. When the objectives of the organization and the personal ones of the employees are aligned in the same direction, we can speak of motivated and efficient employees. Lack of knowledge, training, information and various barriers in communication can lead to problems of the organization due to lack of motivation of employees (Faloba & Muscalu, 2018).

Factors influencing employee engagement and motivation have evolved significantly over the past 30 years. This evolution can be presented in four phases. The first phase refers to the period 1990 - 2000 when employees were motivated by the possibility to have a say, to be involved and to have an active participation in the company. Then, the employees looked for a sense of activity and a balance between personal and professional life. Until 2018, employees were still waiting for the workplace to offer them all the resources and possibilities to be able to meet the requirements related to the objectives of the chosen position. Currently, employees want to get involved and identify with the professional activity and objectives of the organization in which they operate. In other words, they are looking for a better life and a meaning for the talent they show and the performance they have within the organization (Turner, 2020).

Currently, employees want to get involved and identify with their professional activity and the objectives of their employer. In addition, they are looking for jobs that give them the opportunity to self-fulfil, but have the flexibility to organize their private and professional life in accordance to their expectations (Hermeier, 2019). Self-realization refers in most cases to the achievement of set goals compared to the role models of each individual. Thus, organizations must provide an environment conducive to the choice of role models and goals that are in the interest of the organization. For achieving those, the organization is prepared to offer employees rewards. The employees are therefore committed and motivated in the long-term (Sass, 2019).

After presenting the employees' expectations, we will also mention their necessary competencies from the organization's point of view. These competencies refer to the ability to decide and lead a team, to cooperate and support colleagues, to interact and present a topic, to be creative and conceptualized, to organize and execute, to adapt easily and last but not least to imitate (Okros, 2020).

These desires and expectations of employees appeared in the context of the permanent transformation of the socio-economic environment. Through continuous innovation, organizations are able to permanently reposition themselves in the current environment of volatile markets. Proposals for innovation are brought to the attention of the organization by both its own employees and external stakeholders (Lochmahr, Müller, Planing, & Popović, 2019). The impressive technological developments of the 21st century offer a series of fascinating and useful solutions to a greater array of problems. IoT technology has proven to have the ability to make our lives easier, develop smart cities and make the world a friendlier place for life. New technologies can also have a high level of e-waste and huge emissions. Thus, the current concern of both researchers and organizations is of how to achieve a green IoT. Thus, the main directions to obtain a green IoT are to reduce emissions and reduce unnecessary consumption (Alsamhi, S. H.; Ma, Ou; Ansari, M. S.; Meng, Q., 2019).

In the current situation, digital skills are needed, including those for communication tasks. Digital skills are needed not only for executives, but also for managers in order to be able to lead teams and avoid situations of stress and tension in the virtual environment (Yi-Lin Forrest, Nicholls, Schimmel, & Liu, 2020).

The communication skills of a manager are very important due to the fact that they influence not only the efficiency of the interlocutor, but of the entire organization (Lunenburg, 2010).

In order to complete the purpose of the study two research questions were formulated and answered. The research questions were:

1. Which are the main advantages and disadvantages of telework in obtaining the desired results for an organisation?
2. What needs an organisation to do to improve the work in remote teams?

Based on the results obtained regarding the research questions above three hypotheses were formulated:

Hypothesis 1 (H1): Communication efficiency in telework depends on the abilities of the management team!

Hypothesis 2 (H2): Communication efficiency in telework depends on the digital and professional abilities of all team members!

Hypothesis 3 (H3): Communication efficiency in telework depends on the personal characteristics of the team members!

## **2. Methodology**

### **2.1. The qualitative analysis**

Being a new situation, and the scientific literature not having data that would have been analysed previously, I resorted to an empirical research in two stages. The first stage included the qualitative research through which I establish, with the support of experts in the field, which the main problems were in changing the usual communication to a virtual one and organising the remote work. The used tool was a semi-structured interview.

The interviews took place with each person, face to face or online. The questions were focused on the personal experience of the last six months regarding the work in the remote system and the communication and organisational problems that these teams encountered during their professional activities. Even if the number of respondents required to obtain conclusive results using the interview tool is relatively small, this made the research not automatically easier. The use of the interview assumes, beforehand, the assimilation and completion of a complex and laborious process (Fontana & Frey, 1994).

The interview included exclusively open-ended questions, which were organized in a semi-structured way in order to capture as many nuances of the analysed theme as possible. The interview lasted between 30 and 45 minutes, including at the beginning introductory questions related to digitalisation, the level of digitalisation of the organisation in which each respondent

works, the material basis related to advanced technology to enable telework and how the organisation sees teleworking now and in the future.

In addition to the number of respondents chosen, the inclusion of a diversity of organisations and levels of responsibility of respondents was considered in order to find as many situations as possible that the remote teams coordinators encountered in the previous period. During the interpretation and analysis of the results obtained from the interview, both the consensus and the divergent areas of the interviewees impressions were presented.

The entire analysis of the data obtained on the basis of the interviews was carried out in several stages. The first step was to transcribe the respondents' answers to the questions asked. On this occasion, the emotional states were also highlighted, including the intensity presented by the respondents during the interview. In the second stage, two or three general conclusions were formulated for each person interviewed. In the third stage, the main elements were extracted from the texts subject to processing. In the fourth stage, on the reduced structure of the data obtained from the interview, an analysis of frequencies, variations of opinions, intensity was applied and groups were formed according to the respondents' answers. Finally, for the formulation of conclusions, interdependent cause-effect related results were obtained (Backhaus, 2011).

Of the 20 people who participated as respondents to the interview, 70% were managers with middle and top management positions, and the difference, people with responsibilities for coordination and control of remote teams of different sizes. The fields of activity covered by the selected respondents were: ICT, financial institutions, call centers, training and consulting, high school and university education, medical institutions, financial-accounting services, human resources services, automotive industry, real estate development, trade and construction. 85% of respondents came from urban areas and women represented by 55% of them.

The interviewees were exclusively university graduates from Romania and abroad. Thus, the study did not present the point of view of people with medium or general education. The age of the interviewees varied between 25 and 65 years. 100% of the interviewees have work experience of over seven years. All the interviewees were able to coordinate teams in a remote system in the last period of time. It should be noted that only 25% of them carried out such activities on a limited basis before the onset of the crisis caused by Covid-19.

In the introduction of the interview, we discussed the importance of telework, the personal experience of respondents with this way of carrying out their professional activity.

In the main part of the interview, I focused on the most important factors that influence communication efficiency in remote teams. This part contained questions, as: What are the advantages and disadvantages of telework from the point of view of work efficiency?; What were the main challenges while working in a remote team?; What would motivate you to work with enthusiasm in remote teams in the future?; Name the main factors that influence communication efficiency in remote teams?; Which were the main challenges as manager / member of a remote team that you faced during the pandemic? What could improve communication efficiency in remote teams?

## **2.2. The quantitative analysis**

The results obtained after the qualitative analysis were used to build up a questionnaire. The questionnaire contained questions relating to all 18 dependent and independent variables of the process. Each variable represented a quality, ability, or important information evaluated by each single person that answered the questionnaire. At the beginning of the questionnaire three closed questions with a yes or no answer, regarding working or not in remote teams, experience and willingness. The main questions were presented as a seven-point standard Likert scale, used in similar research, with the scales ranging from "not at all" to "extremely much" (i.e. Likert scale 1 – 7).

The respondents had to evaluate, also, on the same scale how much the dependent variable depends on the independent variables.

At the end of the questionnaire, I had questions regarding the age, gender, business experience, rural or urban area and position in the organization (manager or not).

I received 439 responses to the questionnaire, of which 410 were validated and taken into account in the quantitative research conducted. Not all responses could be taken into account given that not all respondents had experience working in a remote system.

Of the validated responses, 60% came from females. 58% were people who did not coordinate remote teams, but participated as members of remote teams. 80% of the people with validated answers expressed their intention and willingness to work with confidence and enthusiasm in the future in the remote system. The age range of the respondents was between 18 and 65 years. 19% of the respondents were in a management or team leader position, 71% were working in urban areas and about 60% had more than three years of business experience.

The 17 factors (independent variables) were divided into three large groups. The first group was related to the management and the company, the second group to the approach to work by the team members, and the third to the characteristics of each member of the team. The first group includes the following factors: management style (authoritarian or supportive), how to approach and make decisions, training offered to employees, clarity of expression of objectives and possible overload of the team. Regarding the approach to work by the team members, we have the following factors: the professionalism of the team members, the degree of responsibility shown towards work, the digital competences of the team members, the degree of involvement in the activity and professional experience. The third group includes the following factors: age of the team members, gender, empathy shown within the team and different perceptions of time.

The data obtained as a result of the questionnaire was analyzed with the support of multiple regression, applied in the SPSS program.

### 3. Results

#### 3.1. The interview

One of the results of the interview is related to the advantages and disadvantages of telework. More than 70% of those interviewed were delighted by the advantages offered by telework, especially in the context imposed by the pandemic caused by Covid-19.

In table 1 I gathered the answers of the respondents regarding the advantages of telework, grouped them into categories, presented how often one advantage was expressed and the feeling related to this issue. The main categories found after analyzing the answers related to the advantages of telework were: higher efficiency, better work – life – balance, better work output and cost advantage. Given to the situation, it is understandable that almost everybody underlined the reduced risk of contacting the CORONA virus. The respondents were presenting that telework is bringing for them more time for their private life, more possibilities to organize their time, better concentration and more productivity.

Table 1. Advantages of telework

Frequency %	Nr.	Advantages of telework	Emotional	Category
55%	1	More time for the family.	happy	Better work – life - balance
42%	2	More possibilities to organize the daily workload.	enthusiasm	Higher efficiency

Source: Authors' own research.

The feelings when talking about the advantages were positive. The younger generation

76%	3	More time for myself.	enthusiasm	Better work – life - balance
24%	4	Better time management.	satisfaction	Higher efficiency
71%	5	More productivity.	satisfaction	Higher efficiency
58%	6	Better task concentration.	satisfaction	Higher efficiency
97%	7	Less risks of contacting a disease.	happy	Higher personal security
71%	8	Saving the travel time.	enthusiasm	Better work – life - balance
19%	9	Saving travel costs.	happy	Cost advantage
22%	10	Better integration of HR - diversity	neutral	Higher efficiency
34%	11	Less interpersonal conflicts.	happy	Higher efficiency
64%	12	Better possibility to express creativity.	enthusiasm	Better output

was really enthusiastic. One reason related to the positive feeling was, also the idea that even in the difficult situation, it exists a possibility to continue their activity.

In table 2 I presented the answers of the respondents regarding the disadvantages of telework, grouped them into categories, presented how often one advantage was expressed and the feeling related to this issue. The main categories found after analyzing the answers related to the disadvantages of telework were: higher expectation, but mainly

communication problems. Because of the regulations regarding social distancing, people were missing in private and in the professional life the possibility to communicate. The main problems presented were telework came unexpected and nobody had the needed training, the needed digital skills, etc.

Table 2. Disadvantages of telework

Answer %	Disadvantages of telework	Emotional	Category
22%	Less identification with the company.	neutral	Communication problem.
91%	Less interaction between colleges.	sadness	Communication problem.
44%	Problems in understanding the boss.	disappointment	Communication problem.
77%	Less communication in general.	disappointment	Communication problem.
27%	Work overload.	disappointment	Higher expectations.
12%	Less motivation.	sadness	Communication problem.
90%	Missing training.	disappointment	Communication problem.
45%	Problems in organizing the workspace.	disappointment	Infrastructure.
38%	More stress.	sadness	Communication problem.
29%	Less help between colleges.	sadness	Communication problem.
43%	Less support from the leader.	disappointment	Communication problem.
51%	More pressure regarding tasks.	disappointment	Communication problem.

Source: Authors' own research.

### 3.2. The multiple

The dependent variable for multiple regression "communication efficiency in remote teams". The independent variables chosen in the regression were the 17 main factors that resulted as determinants for communication efficiency as a result of the research conducted in the multiple regression, the main factors that influenced communication efficiency were: professionalism,

Variables	Variable's name	Coefficient	Coefficient value
X1	RProfessionalExperience	b1	-0,036
X2	RProfessionalism	b2	0,255
X3	RResponsabiliy	b3	-0,146
X4	ROverload	b4	0,016
X5	RTimePerception	b5	0,089
X6	RDigitalSkills	b6	-0,056
X7	RInvolvement	b7	0,200
X8	REmpathy	b8	-0,029
X9	RAge	b9	-0,013
X10	RGender	b10	-0,045
X11	RKnowledge	b11	0,067
X12	RAuthoritarianManagementStyle	b12	-0,068
X13	RSupportivManagementStyle	b13	-0,052
X14	RDecisionMaking	b14	0,142
X15	RTaskClarity	b15	0,215
X16	RTraining	b16	0,095
X17	RTrust	b17	0,315

### regression

responsibility, degree of involvement, clarity of expression of objectives and decision-making.

The multiple linear regression equation of this research is as follows:

$Y = b_0 + b_1X_1 + b_2X_2 + \dots + b_{17}X_{17} + u$  With:  $Y$  = Communication efficiency;  $b_0 = 0,058$ ;  $X_1, X_2, \dots, X_{17}$  = the independent variables as follows:  $\dots$ ;  $b_0, b_1, b_2, \dots, b_{17}$  are the coefficients for each independent variable as presented in the Table 3 below and  $u$  = is the random error for  $Y$ .

Table 3. Coefficients for each independent variable in the model

Source: Authors' own research.

Table 2 in the SPSS regression output shows the model summary, which provides the value of  $R$  (Multiple Correlation),  $R^2$  (Coefficient of Determination) and Adjusted  $R^2$  ( $R^2$  adjusted with Degrees of Freedom). In this model,  $R$  (multiple correlation) has the value of 0.963. This shows the multiple correlation between dependent and independent variables. This means that communication efficiency depends more than 96% on the independent variables presented.

Table 4. Regression output – Model Summary<sup>b</sup>

Source: own research

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	,963a	,927	,922	,0385	,927	193,550

The squared tells dependent determined by independent proportion of means that

a. Predictors: (Constant), RTrust, RGender, RAuthoritarianManagementStyle, RTimePerception, RTraining, RAge, RKnowledge, ROverload, RSupportivManagementStyle, RProfessionalExperience, RDigitalSkills, REmpathy, RDecisionMaking, RResponsabiliy, RTaskClarity, RProfessionalism, RInvolvement  
b. Dependent Variable: RCommunicationEfficiency

Authors'

value of  $R$  us that our variable is the ones in 92.2%. This there are other

factors that influence with a weight of 7.8% the analyzed dependent variable. To validate our hypotheses, this is a very clear result, which shows us once again how important communication is and how many factors depend on its efficiency.

Also, with the support of the SPSS program, I applied the analysis of the variance that gives us the sum of the squares associated with the regression (Sreejesh, S.; Mohapatra, S.; Anusree, M. R., 2014). Their very small value, of only 0.0385, shows us the correctness of the results obtained in the regression. Table 3 reports an analysis of variance (ANOVA). This table shows all the sums of squares associated with regression.

The third column shows the associated degrees of freedom for each sum of squares. The mean sum of squares for the regression and residuals are calculated by dividing respective sum of squares by its degrees of freedom. The most important part in this table is F value, which is calculated by taking the ratio of mean square of regression and mean square of residual. For this model, the F value is 193,550, which is significant ( $p \leq .01$ ). This result tells us that there is less than a 0.1 % chance that an F-ratio this large would happen if the null hypothesis were true.

Therefore, looking at the ANOVA table, I can infer that the regression model results in significantly better prediction of communication efficiency.

Table 5. ANOVAa

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	488,186	17	28,717	193,550	,000b
	Residual	38,724	261	,148		
	Total	526,910	278			

a. Dependent Variable: RCommunicationEfficiency

b. Predictors: (Constant), RTrust, RGender, RAuthoritarianManagStyle, RTimePerception, RTraining, RAge, RKnowledge, ROverload, RSupportivManagStyle, RProfessionalExperience, RDigitalSkills, REmpathy, RDecisionMaking, RResponsabiliy, RTaskClarity, RProfessionalism, RInvolvement

Source: Authors' own research

Multiple regression confirmed that based on the data obtained after the application of the questionnaire, communication efficiency is one of the most important elements for the success of organizations in the context of the current pandemic. This important factor depends both on the professional training of the team members and on the availability and personal ability of each to adapt quickly to inevitable changes.

According to Table 3, 4 and 5 all three hypotheses were tested and validated in the quantitative research using multiple regression conducted with the support of the SPSS program.

#### 4. Discussion

Communication efficiency is an essential element in achieving the objectives of an organization, whether we refer to interpersonal communication, intergroup, intragroup, within the organization or externally. The whole communication process is a very complex one, and errors commonly occur from the simple transmission of information. Socio-psychologists estimate that between 40 to 60% of the information transmitted from the sender to the receiver is lost. In addition, it is known that the human brain perceives signals transmitted by body language more easily and faster than those transmitted by words.

For formulating the interview conclusions, and after gathering all the answers, the responders were selected into two groups. One group included the people that found remote work a positive solution, while the second group included the rest. Telework is generally seen as a solution to keep the level of activity afloat and not as a permanent solution. Around 20% of those

interviewed consider remote communication a solution to be used exclusively in cases where they do not have other possibilities and means. They consider face-to-face communication as the most efficient solution to be able to carry out their activity. Of course, those who see remote work as a last resort are especially those who work in areas that involve physical work. Also, a certain restraint towards telework is expressed by those in the public administration, in the health system and partially in education.

Another reason presented by respondents, who do not have much confidence in telework, is the lack of digital skills. Among the negative reasons and limitations of using remote work were the lack of technology both within the organization and at the home of the employees. During the interview, the level of technology employed by the suppliers and customers that each company works with was also highlighted.

Thus, for a telework system, not only the organization needs technology and staff training, but also the rest of its stakeholders. Among the negative experiences mentioned by remote team leaders were those related to technical issues, such as power outages, loss of internet connection and certain incompatibilities of the equipment available to each member of the team. Other negative aspects that teleworking brings with it are: lack of socialization between colleagues, work overload, lack of personal communication, non-involvement and often the suspicion of superiors that the work is not carried out with the same seriousness from a distance as carried out from the office. All respondents acknowledged that they do not see the possibility of developing their own organization in the future without investing in digitalization. This involves an investment in both technology and staff training. The training and preparation should be planned first, but not exclusively, in the management area in order to properly coordinate the remote teams.

The vast majority of respondents highlighted the benefits of telework as follows: increased productivity by increasing employee attention and eliminating unnecessary workloads in teams, reducing costs at the organizational level, streamlining time, increasing flexibility and overall efficiency of the work carried out. Remote work offers a more relaxed work environment, better concentration, a higher degree of flexibility and a reduction in downtime for each employee. This requires management to provide clear tasks that it can explain correctly, have a well-trained team and communicate directly and honestly.

The necessary conditions for a manager to coordinate the remote team correctly include: knowing the work team, clearly defining objectives, outlining tasks and specifying deadlines, monitoring their achievement, completing objectives and expressing appreciation for the results obtained by the team. One of the respondents emphasized that in the teams he leads he does not forget to celebrate every success they have, even if they do not meet face to face.

The results the remote teams obtained during the period when there was no possibility of working in the regular office depended on communication efficiency. Of course, this is not the only factor that guarantees the success of a team working in a Remote system. In the context of the pandemic, communication was the factor that made the difference. It proved to be relevant, especially in the case of teams formed after the outbreak of the pandemic that forced employees to isolate themselves in their own homes.

The general conclusions of the interview were that one of the main success factors for the work in remote teams was communication efficiency. One other important conclusion was the fact that trust in team members and in the manager was an important issue. A third general conclusion of the interview was the fact that training is needed for everybody in order to assure the long-term success of remote teams. The most frequent mentioned elements were: communication, the need to socialize, the overload of work, the needed training, the trust in the remote team and the new image of the manager. From the big number of elements presented by the respondents, I focused on the ones which influence communication efficiency, because here I could find an interdependent cause-effect.

The three research hypotheses stipulate that the dependent variable is dependent on the independent variables defined in the qualitative research. In other words, communication efficiency in telework is determinate by: the trust of team members and its leaders, digital skills of team members, degree of responsibility with which work in remote teams was approached, the

professionalism team members displayed, the training that the team members benefited from, the clarity with which the objectives were transmitted, the way to approach decisions, the management style displayed by the team leader, workload, the necessary specialized knowledge needed to carry out the professional activity, demonstrated empathy of team members, the degree of involvement shown by the team members, the age and sex of the team members.

The study analyzed, also, the possibility that communication efficiency is influenced in general or in remote teams by cultural heterogeneity. This factor proved to be inconclusive in our analysis, so it was not further treated and discussed.

## Conclusions

This research highlighted the particularly important role of communication and in this context the role of the remote team leader. The team leader must keep in mind that when communicating, it must be done clearly, simply, openly and honestly, in order to be correctly understood by his team members. Lacking the support of body language, virtual communication focuses exclusively on the content of the message expressed. Thus, even more than in the classic activity, the manager must have special communication skills and show empathy towards the members of his team. In order to keep the team motivated and interested in the virtual environment, the manager must use modern tools to motivate, support and express his appreciation when the team, respectively the members of his team, achieve their goals successfully. According to the interviewees, it is important to "celebrate success even in virtual teams."

According to the empiric research, 17 factors were selected to be the main ones determining the success of communication efficiency, and those were taken into consideration in the multiple linear regression. The results also told us that other factors exist. In the special conditions of this study, these represent under 8%.

Because of the current situation, it was very important to understand how the employees manage to work in a remote system and what they need in order to be successful in the future. Therefore, for the companies who supported the research, it was relevant to know the factors that really influence communication efficiency.

Managers must keep in mind that working remotely does not affect relationships between colleagues or between colleagues and superiors. The future use of the telework tool must bring to the attention of management all the elements through which it can support and motivate its team, even remotely.

Managers with experience in coordinating remote teams mentioned that the reluctance towards this new way of organizing and carrying out work by colleagues or subordinates is mainly related to the fact that the vast majority have faced this way of working in a crisis context.

The lack of preparation for this change has led to the known "resistance to change", and thus, in some cases, a decrease in the efficiency of the work carried out. For the future, it is necessary to prepare and observe that teleworking will be one of the main ways of carrying out activity where it is possible. This type of activity is suitable for people with a medium and a higher education. Basic labor, or physical work, will be in the near future replaced step by step by robots. Thus, a number of jobs will disappear, and the staff involved in this type of work will have to rethink and reorient to other activities necessary for the development of modern society.

Telework does not mean, and should not mean in the future, a form of limiting interpersonal interaction.

One of the main limitations of this study is the context in which this research was conducted. Given that telework and the level of acceptance and its possibilities of use were analyzed in the context of the pandemic caused by Covid-19, the respondents' responses were influenced by a new, unpleasant and sudden situation. This involved additional limitations related to the movement of people from one point to another.

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The pandemic caused by Covid-19 brought with it a series of regulations that required citizens to limit their interactions to a minimum, not to leave their houses and not to meet other people. This situation caused, in addition to stress and concern for one's own health, frustration with the inability to interact and communicate directly with loved ones.

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