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Worker's Satisfaction and Intention toward Working from Home—Foreign Non-EU Citizens vs. National Workers' Approach: Case Study of Central European Countries (Visegrád Group (V4))

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Abstract: The COVID-19 lockdown has brought about many sudden changes in the social and work environment, causing organizations and businesses to change work conditions to adapt to the new situation which has affected millions of workers who shifted to telework. The teleworkers' variations in gender, age, residency situation, status as national or foreign employees, and many other aspects create differences in their response toward the telework experience. This study attempts to fill the literature gap concerning the differentiation in response between national and foreign employees' satisfaction with the working from home experience and their future intention to work from home, with a case study of the Visegrád Group as an example from Central European countries. The study found that 84.4% of teleworkers were satisfied with working from home, but no significant difference was found between national and foreign teleworkers in their satisfaction with the telework experience; this satisfaction mainly derives from allocating the gained time to social-personal activities. A surprising result presented by this research is that, in spite of the fact that foreign non-EU-citizen workers were satisfied with the teleworking experience, they do not tend to work from home due to fears of losing their jobs and residence permits, whereas national teleworkers have the intention to work from home if given the opportunity. Another important addition of this study is the development of a new scale specifically for measuring employee satisfaction with working from home instead of using traditional job satisfaction scales.

Keywords: telework; work from home; CE countries; V4 countries; job satisfaction; employee intention; willingness to work remotely; working from home satisfaction scale



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1. Introduction

The accelerated progression in ICT has resulted in a considerable transformation in the way businesses and organizations build relations with customers and deliver their services/products, and it has also changed the practices of work and offered more-decentralized work premises (Houston and Reuschke 2017; Hussein et al. 2011). These technological advancements have enabled humans to exercise more control over their lives and made people more able to handle the obstacles and challenges which are encountered in their lives more easily (Felstead and Henseke 2017), challenges such as the experience caused by the COVID-19 pandemic and the regulations set out globally to control the spread of the infection. Here, new technology has made it possible to introduce the home office as a solution to keep businesses alive and the wheel of the economy running at the time of lockdown, which resulted in a severe change in the work environment for many workers (HSE (Health and Safety Executive) 2021), resulting in work-time flexibility,

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decreased working hours, and a changing workplace environment (Kamerāde et al. 2019). This solution has been widely implemented, eliminating the time required to travel to work and providing employees with the opportunity to reallocate the gained time to their families or friends (Balderson et al. 2020).

After the COVID-19 experience, terms such as working from home, remote working, teleworking, home office, and telecommuting jumped to the forefront of the discussions, debates, and analyses in academic research, resulting from the popularity of these kinds of jobs due to the appealing conditions they offer, such as the flexibility in terms of worktime and working hours, more independence in performing tasks, as well as higher job satisfaction, but, at the same time, the new conditions arising from working from home may bring new, hidden challenges (Karanikas and Cauchi 2020). One of these challenges is the difference in accepting the work-from-home concept driven by the various motivations and interests of workers who see the benefits of working from home and may also feel threatened by the new work conditions related to the uncertainty of dealing with the virtual environment (Shareef et al. 2018), difficulties in handling new technology, fear of change, and the probability of losing their jobs (Bernhard and Grundé 2013; Chadwick 2011). From this context, this study decided to evaluate workers' intention toward working from home after the COVID-19 lockdown experience with regard to the different interests and motivations of employees, studying the anticipated differentiation between foreign and national workers, as no study has been found in the literature comparing the difference in intention between foreign and national workers toward working from home. In attempt to fill this gap, this study conducted quantitative research, taking a Visegrád Group countries (V4 countries) case study as an example from Central European countries.

2. Literature Review

2.1. Workers' Satisfaction with Working from Home

While prolonged and tremendous research of the traditional work environment in the office has been conducted, there is not enough steady knowledge available regarding the telework environment and its impact on the satisfaction, productivity, and mental health of teleworkers, and the intricacies affecting their intentions (Allen et al. 2015; Eurofound and International Labor Office 2017; Martin et al. 2022).

The International Labor Organization recognizes the homeworker and home-based worker; the latter is called a teleworker when the employee uses ICT tools to perform their job (International Labour Organization 2021). Depending on this distinction, employees who shifted to performing their jobs from home due to the COVID-19 pandemic precaution measures are considered teleworkers; hence, teleworking is featured by using ICT products (Messenger and Gschwind 2016).

Gajendran and Harrison (2007)'s study involving 12,883 employees found that there are small positive effects of telecommuting on work satisfaction, performance, turnover intent, and mental health as a mediator; meanwhile, Felstead and Henseke (2017) expressed the notion that working from home may raise job satisfaction.

In the search for more evidence regarding the positive effect of working from home on job satisfaction, performance, and intention, Kröll and Nüesch (2019)'s research on the influence of flexible work practices on employees' turnover intention and job satisfaction finds that home working increases employees' satisfaction consistently and decreases their intentions to leave their jobs; in the same context, Yang et al. (2021) reported that employees' productivity and job satisfaction increased when executing their job from home. In addition, they found that one of the main drivers of raised satisfaction is the reduction in anxiety caused by spending time commuting; meanwhile, Vega et al. (2015) reported the differences in the job satisfaction of working from home employees between working days spent at the office and those spent at home and recorded higher job satisfaction levels during the working from home days.

The flexibility that working from home provides can decrease family–work conflict and eventually enhances a person's job satisfaction (Solís 2016) as whenever a person's

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work-time conflicts with their family life, it leads to a lower balance engagement in their work or family life, which is reflected in lower productivity and satisfaction (Greenhaus et al. 2003).

Even though job satisfaction proved to increase in many studies due to the work flexibility gained from working from home during the COVID-19 lockdown, we should not ignore the negative effect of the growing feeling of loneliness on productivity and job satisfaction which derives from social isolation relating to less personal contact with colleagues or customers (Wood et al. 2021; Joyce et al. 2010).

The important comparative study of Martin et al. (2022) assessed how the teleworker's use of digital communication tools impacts the evolution of the teleworker's work productivity, satisfaction, and stress before and during the lockdown in 2020. They found that the group which had a master's degree or higher and that were using digital tools on a weekly or daily basis experienced a growth in their work productivity, but at the same time, their work satisfaction decreased, and this may be because of the lack of social interaction. Another result of Martin et al. (2022) shows that the increase in using digital tools during lockdown results in teleworkers dealing with more excessive information, which puts her/him under pressure and stress and eventually leads to lower work productivity and satisfaction.

From another point of view, even though fewer work hours lead to less income, an evaluation of satisfaction with time against money, as discussed by Hershfield et al. (2016), disclosed that persons who prefer time to money are happier, and the higher their preference for time to money, the happier they become, taking into account the fact that Bellet et al. (2019) proposed that a happier worker is a more satisfied and productive one. In this context, Colley and Williamson (2020)'s study found that the vast majority of teleworkers expressed that the time flexibility they had when working from home allowed them to allocate more time to their families and provide their children with a satisfying amount of attention.

From another perspective, Karanikas and Cauchi (2020) debated that the working from home environment may propose unexpected negatives, such as the fear of job loss, a lack of confidence in using new technology (Bernhard and Grundé 2013; Chadwick 2011), feelings of uncertainty in the virtual environment (Shareef et al. 2018), or the inconvenience of home equipment and uncomfortable space, but even the work environment at home may be less comfortable for work compared to the traditional onsite office (Cuerdo-Vilches et al. 2021). Despite the presence of employees' children, spouse, or mates in the working from home environment, teleworkers rarely reported distractibility and discomfort as a negative aspect of working from home (Wegner et al. 2011). In contrast, Zürcher et al. (2021) found that teleworkers reported less distractibility when working from home compared to working on-site, as well as higher job satisfaction.

Finally, studies and research concerning working from home job satisfaction should take into consideration the worker's productivity as a vital mark of satisfaction, since Haapakangas et al. (2018) declared that the employee's satisfaction with the workplace has a direct influence on his/her productivity.

2.2. Workers' Intention to Work from Home

Shareena and Shahid (2020) found that workers' intention to work from home is related to their children's presence at home, the availability of a decent and comfortable space for work, calm noise-free space, and sufficient ICT equipment. Barrero et al. (2021) conducted a mass survey of more than thirty thousand respondents in the USA and found that 20% of full-time workers intended to work from home full-time once the COVID-19 lockdown ended; meanwhile, only 5% of workers were working full-time from home before COVID-19 pandemic measures.

In the same regard, Felstead and Reuschke (2020) reported that 88.2% of home-workers preceding and within the COVID-19 restriction measures period had the intention to continue working from home for some working days per week, whereas 47.3% of workers

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expressed their intention to switch to entirely home working if they had the opportunity; furthermore, 50% of new workers who had little experience working from home expressed their intention to continue working from home after the COVID-19 lockdown ended.

From another perspective, Ortiz-Lozano et al. (2022) found that the higher the age of teleworkers, the less willing they were to continue working from home after the COVID-19 restrictions ended, and they reported a surprising result that whenever a teleworker is of the opinion that it is harder to accomplish tasks within the time frame, their intention to keep working from home increases. Additionally, Ortiz-Lozano et al. (2022) noticed that when employees are convinced that working from home enables them to be more organized, their intention to keep working from home increases remarkably; furthermore, workers consider that teleworking serves working women by providing this group with more time to look after their family, as well as facilitating taking care of children. In this regard, Wheatley (2017) expressed that making the decision or having the intention to work from home may be pushed by the duties of the household, especially for women, even if they are not satisfied with the working from home experience.

Finally, Green (2017) found that the teleworking lifestyle can facilitate work for people with disabilities.

2.3. Foreign and National Workers' Satisfaction and Intention

Foreign workers are an important segment of the EU workforce who have received increased attention over the years. In this context, Fasani and Mazza (2020) reported that migrant EU workers face an increased risk of losing their jobs compared to national EU workers and that these risks are higher among females than among males. On the other side, Clark (1998) denoted that job satisfaction for the same work may vary between national and foreign workers due to the difference in cultural and institutional background. In this regard, many researchers studied the impact of worker's culture on job satisfaction, such as de Bustillo Llorente and Fernandez-Macias (2005) and Hauff et al. (2015). These differences in job satisfaction between foreign and national workers may be reflected in a difference in intention to continue working in the same job since it is widely accepted in the literature that job satisfaction has a key impact on the intention of leaving work (Poon 2004; Paillé et al. 2010). In the same context, if we look at e learning as an example of teleworking for both trainees and trainers, Alassaf and Szalay (2020) reported that satisfaction with e learning leads to a high level of intention to practice e learning in the future.

These discussions stimulated this study to test the influence of satisfaction with work from home on the intention to work from home in the future among both national and non-EU foreign workers within Central European countries.

H1. Satisfaction with the work from home experience impacts national workers' intention to work from home in the future.

H2. Satisfaction with the work from home experience impacts foreign workers' intention to work from home in the future.

3. Objectives and Importance of the Study

The ultimate goal of this study is to assess the differences in intention toward working from home between national and foreign workers in EU countries regarding their interests and concerns and to discover the impact of satisfaction with work from the home experience on the intentions of the two groups, as the COVID-19 lockdown offered a practical experience to work from home to a wide range of people.

Furthermore, EU countries are hosting a large number of migrant workers as 12.6% of the EU28 labor force have a migrant background (EU-OSHA-European Agency for Safety and Health at Work 2015). This study provides tested results of satisfaction with working from home for this important segment of the workforce and presents the causes which oppose or boost this satisfaction.

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Another goal of this study is to develop a new scale specifically designed for assessing employees' satisfaction with teleworking because working from home has created new conditions for the job environment and provided a new means to perform tasks and communicate and interact with superiors and co-workers using ICT in remote and virtual workplaces (Karanikas and Cauchi 2020), aspects which are nonexistent in the traditional work environment. Here, this study takes the opportunity to fill in this gap in the literature as previous studies have used traditional work satisfaction scales to assess working from home satisfaction.

4. Materials and Methods

Preceding COVID-19, ICT and technical support were not significantly correlated with job satisfaction and intentions to continue working from home (Galanti et al. 2021); moreover, this study did not distinguish any scale specifically dedicated for workers' satisfaction with working from home in the literature, as the studies concerned with this subject used traditional job satisfaction scales which ignored the new environment of tele jobs related to working online, the use of new technology, and different online services (Waizenegger et al. 2020). Besides, the new working environment has presented new kinds of relations and incentives that were not available before such, as full online communication with coworkers and superiors (Negulescu and Doval 2021), a cost and time reduction caused by eliminating commuting, and family–job balance (Balderson et al. 2020; Colley and Williamson 2020). In addition, disadvantages have emerged from the extra cost of using the internet, occupying space in a residential place, and the existence of children and a spouse (Cuerdo-Vilches et al. 2021; Wegner et al. 2011) who may cause some distraction; all of these disadvantages derive from a blurred line between being at home but also being busy with a job (family understanding of WFH) (Yang et al. 2021).

Based on the aforementioned reasons, this study decided to design a new scale specifically for measuring workers' satisfaction with working from home instead of using traditional job satisfaction scales. We then adapted and elaborated a scale for measuring workers' intention to work from home depending on the reliable scales of intention already used in the literature.

The next step in this study is to conduct a quantitative work to collect the necessary data for assessing foreign and national workers' job satisfaction and their intention to work from home using surveys in V4 countries. The collected data will be analyzed statistically to discover the differences between foreign non-EU and national workers in satisfaction and intention to continue working from home, define the causes behind this difference if it exists, and test the hypotheses of the study, taking into account the gender of workers in those analyses.

4.1. Measuring Working from Home Satisfaction/Developing New Scale

To measure teleworking satisfaction, this research elaborated a new scale depending on several reliable job satisfaction scales and users' satisfaction with online services; justifying and the validation of the new scale will be discussed and explained in what follows.

Yang et al. (2021) argued that satisfaction should be evaluated with one question depending on Scarpello and Campbell's (1983) suggestion, and justified this opinion by presenting many studies, such as Cheung and Lucas (2014) and Nagy (2002), which utilized a single-item measure to assess satisfaction. Opposing Yang et al.'s (2021) opinion, this study chose a multiple-item scale depending on Diamantopoulos et al.'s (2012) research, which declared that under almost all conditions that usually occur across practical practices, multi-item scales obviously surpass single-item scales regarding predictive validity, and under certain conditions, single-item scales act in the same way as multi-item scales; hence, empirical studies should be careful when using a single-item scale as it should be used strictly and under specific conditions.

In regard of Alassaf and Szalay's (2020) 18-item scale developed to assess student satisfaction with online courses during the COVID-19 lockdown in CE countries, considering

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online learning as an example of working from home for both two ends of the process, such as in the case of trainees and trainers who use ICT to complete tasks remotely, this particularity of working remotely using ICT has been ignored by traditional job satisfaction scales. This research adapted the mentioned Alassaf and Szalay (2020) scale to comply with various aspects of working from home; on the other hand, in order to overcome any possible neglect of any aspect of traditional job satisfaction constructs, this study also revised and used traditional job satisfaction scales: Andrews and Withey's (1976) scale, that was revalidated by Rentsch and Steel (1992), Schriesheim and Tsui's (1980) scale, and Bono and Judge's (2003) scale, which was adapted originally from Brayfield and Rothe (1951). Finally, another item adapted from Yang et al.'s (2021) study concerns satisfaction with the working from home environment relating to interruptions caused by others in the home, such as a spouse, children, or roommates.

From the abovementioned scales, this research elaborated a new 20-item scale designed especially for assessing workers' satisfaction with teleworking. To validate this scale, the researchers conducted a pilot survey with 72 respondents, executed factor analysis to eliminate the repeated items, and confirmed the 20 items of the scale. Then, the researchers sent the scale to three experts of the labor market who confirmed the validity of the scale. To confirm the reliability of this scale, Cronbach's alfa test was performed on the final survey and a score of 0.86 was obtained; this exceeds the minimum criterium of 0.7 set by Nunnally (1978).

The final telework satisfaction scale consists of 20 items, as shown in Appendix B. Finally, the research added one open-ended question about what caused responden

Finally, the research added one open-ended question about what caused respondents to be less satisfied.

4.2. Measuring Home-Work Intention

To assess workers' intentions to work from home after they widely experienced it during the COVID-19 lockdown, this study depends on Alassaf and Szalay's (2022) five-item scale, which reliability reported a value of 0.82 using Cronbach's alpha test. Alassaf and Szalay's (2022) scale was designed to evaluate users' intentions to keep using e-services after the COVID-19 lockdown ended in V4 countries; this study chose this scale regarding the similarity in case of employees/users using online ICT tools to perform tasks/services remotely. The original scale was developed using Esterhuyse et al.'s (2016), Pavlou's (2003), and Gefen and Straub's (2000) scales from their studies about consumers' adoption of IS and e commerce.

The research added one item to assess the feeling of fear of losing one's job in the case of working from home; additionally, one open-ended question was included to address the causes of fear of losing one's job if the respondent experienced this feeling.

4.3. Sample and Procedure

This study deals with workers in CE countries by taking Visegrád group countries as a case study. All items were translated into the four languages of V4 countries (Czech, Hungarian, Slovakian, and Polish). The targeted population falls into two groups: national and foreign workers who worked from home for at least two months during the COVID-19 pandemic lockdown.

This research designed a single cross-sectional survey for the two targeted groups using judgmental sampling that selected only workers who have practiced working from home for at least two months during the COVID-19 pandemic lockdown. In total, 500 questionnaires were distributed (325 for national citizens, 175 for foreigners) in the 4 countries; we received 423 valid responses, 92 in Czech (61 national workers, 31 foreign workers), 132 in Hungary (96 national workers, 36 foreign workers), 101 in Poland (69 national workers, 32 foreign workers), and 98 in Slovakia (67 national workers, 31 foreign workers).

None of the targeted foreign workers in the four countries were EU citizens.

This research used a 5-point Likert scale to assess the respondents' answers to satisfaction and intention questions.

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The questionnaire contains 20 items for measuring satisfaction, 5 items for intention, 1 question to assess fears of one's losing job, 1 open-ended question to address the causes of fear of losing one's job if the respondent experienced this feeling, and 1 open-ended question about what caused a respondent to be less satisfied with working from home, as well as questions of the respondents' general information regarding their gender, age, etc.

The questionnaire was distributed between 2 August 2021 and 28 January 2022 to the respondents in person with the help of a small local team of PhD/master's students in each of the four targeted countries.

5. Results and Interpretation

This study developed two new variables from the answers of each of the satisfaction and intention scales collected from the responses of the questionnaire to be used in the analysis, namely, overall satisfaction and overall intention. To provide the mean of all the answers of the satisfaction and intention of every respondent, the SPSS program was used in all of the analyses.

5.1. Sample Background Analyzes

In total, 30.75% of respondents were foreign non-EU citizen workers (130 workers) and 69.25% of respondents were national workers (293 workers); see Figure 1.

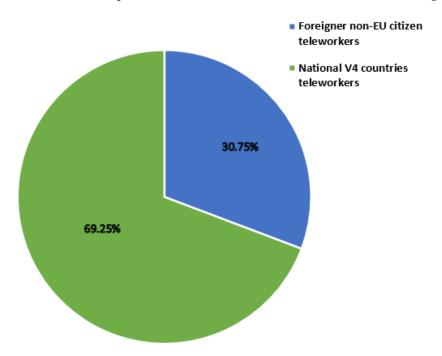


Figure 1. Foreign non-EU citizen teleworkers vs. national V4 countries teleworkers.

In total, 22% of the respondents worked in Czech (61 national workers, 31 foreign workers), 31% worked in Hungary (96 national workers, 36 foreign workers), 24% worked in Poland (69 national workers, 32 foreign workers), and 23% worked in Slovakia (67 national workers, 31 foreign workers); see Figure 2.

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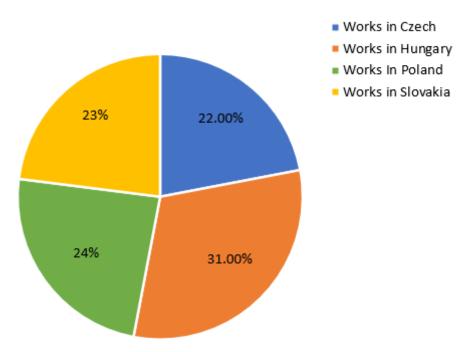


Figure 2. Teleworker geographical distribution within V4 countries.

In total, 47.75% of respondents were females and 52.25% were males (202 female, 221 male); see Figure 3.

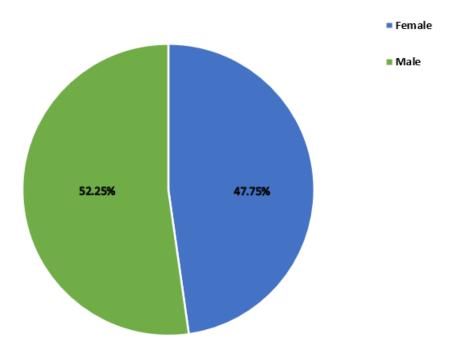


Figure 3. Gender distribution.

Table 1 shows a detailed sample distribution and demonstrates gender and national/foreign workers ratios in each of the V4 countries. In the sample as a whole, these ratios will be discussed thoroughly when assessing the workers' satisfaction depending on gender and citizenship in the next paragraph.

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Table 1. Gender and foreign/national workers distribution of the san	iple over V4 countries.
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	Foreign	Workers	National	Workers	All Workers	
	Female	Male	Female	Male	Female	Male
	14	17	30	31	44	48
Czech	45.2%	54.8%	49.2%	50.8%	47.8%	52.2%
Republic	33.7% of Cze	_	66.3% of Cz	1 ech workers		ondents total sample
	17	19	48	48	65	67
	47.2%	52.8%	50%	50%	49.25%	51.75%
Hungary	27.3% of H work	- Iungarian	-	6 Hungarian kers	132 Respondents 31% of total sampl	
	13	19	34	35	47	54
Poland	40.6%	59.4%	49.3%	50.7%	46.5%	53.5%
	32 31.7% of Polish workers		69 68.3% of Polish workers		101 Respondent 24% of total sample	
	15	16	31	36	46	52
	48.4%	51.6%	46.3%	53.7%	47%	53%
Slovakia	31.6% of S wor	- Slovakian	-	7 Slovakian kers		ondent tal sample
	59	71	143	150	202	221
Total	45.4%	54.6%	48.8%	51.2%	47.75%	52.25%
101a1	130 Resp 30.75% of to			ondents otal sample	423 Res	pondent

5.2. Working from Home Satisfaction during COVID-19 Pandemic Precaution

Analyzing the collected data starts with a descriptive analysis, taking into account that whenever the overall satisfaction mean of a response oversteps the middle of the scale (three is the middle of the five-point Likert scale), the respondent is considered satisfied.

In total, 84.4% of the respondents (357 respondents) were satisfied with working from home; this percentage was almost the same in all V4 countries. Hungary was the least satisfied with 81% (107 respondents) due to the inconvenience of technical problems, as 68% of the unsatisfied respondents expressed.

On other hand, international non-EU workers have a relatively higher percentage of unsatisfaction rate, at 27% (35 respondents), whereas 89.4% of national teleworkers (262 respondents) were satisfied with their teleworking experience (see Table 2).

Table 2. V4 countries teleworkers' satisfaction with working from home experience during COVID-19 lockdown; foreign non-EU citizens vs. nationals.

	Satisfied	Not Satisfied
V4 countries teleworkers	84.4%	15.6%
Foreign non-EU nationality teleworkers	73%	27%
National V4 countries teleworkers	89.4%	10.6%

This research used one sample T-test to test if teleworks' job satisfaction for each of the sample groups (grouping variable: national/foreign workers) and the whole sample significantly exceed the middle of the scale. Consequently, the studied society tended to be significantly satisfied with working from home.

The result confirmed that V4 workers were satisfied (overall satisfaction mean = 4.3, p value for one sample T-test = 0.02 < α = 0.05). Overall, the satisfaction rates among national and foreign teleworkers were M = 4.5, 3.85, respectively, with a p value < α = 0.05 for both, meaning that the vast majority of teleworkers (84.4%) in V4 countries were satisfied with the telework experience during the COVID-19 lockdown.

Furthermore, an independent samples T-test was conducted to see if there was the existence of a significant difference between national and foreign employees in their satisfaction with their working from home experience. The test result with a p value for the independent sample T-test = $0.604 > \alpha = 0.05$ (the case of equality of variances assumed as the F coefficient of Leven's test has a p value = $0.850 > \alpha = 0.05$) shows no significant difference between national and foreign teleworkers in their satisfaction with their telework experience during the COVID-19 lockdown (see Table 3).

Table 3. Independent samples tests for V4 countries workers' satisfaction with working from home experience; foreign non-EU citizens vs. nationals, and females vs. males.

	Independent Samples Test							
		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig.	Sig. (2-tailed)				
Satisfaction with working from home experience. (Foreign non-EU citizen/national workers within V4 countries)	Equal variances assumed	0.038	0.850	0.604				
	Equal variances not assumed			0.616				
Satisfaction with working from home experience, within V4 countries.	Equal variances assumed	1.119	0.294	0.301				
(female/male)	Equal variances not assumed			0.295				

Another independent samples T-test was carried out to investigate the existence of a significant difference between females and males in their satisfaction with their working from home experience; the result declared that there was no significant difference between female and male teleworkers in their satisfaction with their telework experience during the COVID-19 lockdown: p value = 0.301 > α = 0.05 (case of equality of variances assumed as the p value of F coefficient of Leven's test = 0.294 > α = 0.05) (see Table 3).

More analyzes were performed to investigate the satisfaction motives of the working from home experience for national and non-EU workers within V4 countries taking, into account genders and country of work in this investigation.

Appendix A shows that the dominant cause of working from home satisfaction is the capability to allocate more time for family, friends, or self-relief, with 46.8% of satisfied workers, followed by benefitting from eliminating commuting time, allowing them to do other things, and decreasing anxiety which derived from the routine time of transportation, with 28.6%, and, finally, cutting the cost of commuting and other expenses relating to working in the office such as buying clothes, foods, and perfumes, with 24.6%. These results demonstrate that the majority of workers appreciate the time saved by working from home more than the money it saves; these preferences are almost the same for all foreign and national workers. In the same context, from the gender approach, we can easily distinguish that females within both foreign and national workers groups are satisfied with working from home because of the time gained for family, friends, or self-relief (social

and personal time), with about 55.6% of satisfied females, followed by cost reduction with 23.7%, and eliminating commuting time with 20.7%, whereas males appreciate both social–personal time and the time gained from eliminating commuting time, with 38.8% and 35.6% in sequence, where cost reduction tables in third place of their preferences. Here, we can say that both genders are satisfied with working from home because of the possibility to allocate more time to family, friends, or self-relief (social–personal time) in the first place, whereas females appreciate cost reduction more than males who prefer cutting their commuting time over saving money. These results are almost the same in each of the V4 countries, as evident in Appendix A.

From another perspective, the results in Appendix A show that only 15.6% of the respondents in V4 countries are unsatisfied with their working from home experience, and the motives of this dissatisfaction derived—in the first place—from the inconvenience which can be experienced from technical problems that workers have to deal with (37.9% of unsatisfied workers), with the extra cost of using the internet and using personal ICT tools arriving in second place with 25.7%, whereas the distraction from others existing at home, such as children, a spouse, and residence mates, as well as the blurred line between personal life and work, finishing in third place with 16.7% for both causes. Only 3% of unsatisfied workers expressed that their unsatisfaction was because of occupying space in a residential place, which may cause discomfort for others.

Those ranks of unsatisfaction causes are the same between foreign and national workers within V4 counties, whereas they differ a little between females and males, where the inconvenience of technical problems is the first cause for both genders, the extra cost of using the internet and using personal ICT tools arrives in second place for females, followed by the distraction which derives from the existence of children, a spouse, residence mates at home, and then the blurred line between personal life and work finishes in the last place. They did not demonstrate any objection of occupying space in a residential place; on the other hand, males placed the distraction which derives from the existence of children, a spouse, residence mates at home, and the blurred line between personal life and work, in second and third places, before the extra cost of using their own ICT. Finally, only 6.1% of unsatisfied males registered objections of discomfort caused to others by occupying space at home.

From the above comparisons, we can conclude that the technical problems the employees have to deal with during working from home form the biggest problem of unsatisfaction. Additionally, males appreciate maintaining lines separating work and private life and focusing on work without distraction at the expense of the money they pay for using their own ICT, whereas females show more objections to the extra cost of using their ICT more than the negative effects on private life and focusing on work, but generalizing the ranking of dissatisfaction reasons in each of the V4 countries individually is not practical as the numbers of unsatisfied respondents are insufficient to make generalization in each country separately, with 14 unsatisfied respondents in Czech, 25 in Hungary, 14 in Poland, and 13 in Slovakia. The related statistical information is shown in Appendix A.

5.3. Workers' Future Intention to Work from Home

Starting with descriptive analysis, taking into account whenever the overall intention mean of a response oversteps the middle of the scale (three is the middle of the five-point Likert scale), the respondent is considered to have the intention to work from home.

Table 4 shows that 80.2% of the respondents (339 out of 423 respondents) have the intention to work from home in the future if they have the chance. This percentage was almost the same in all V4 countries, but this percentage is general and it does not reveal if there are any differences among the studied population regarding national/foreign workers or regarding their gender; hence, 87% (255 respondents) of national workers have this intention, whereas most foreign workers (67%, 87 respondents)¹ do not tend to work from home in spite of their satisfaction with their working from home experience (as resulted in the previous paragraph). This may be related to workers' concerns of losing jobs since

64% of foreign workers expressed concerns about deportation probabilities in case they lost their jobs and thus work residence permits. To corroborate this assumption, this research conducted a correlation test between the intention to work from home and fear of losing one's job among foreign workers. Before doing this, one sample T-test was used by this research to test if the teleworkers' overall intention to work from home in the future of each of the sample groups (grouping variable: national/foreign workers) significantly exceeds the middle of the scale. Consequently, the studied groups significantly intended to work from home in future if they were given the chance.

Table 4. V4 countries teleworkers' intention to work from home in future: foreign non-EU citizens vs. nationals.

	Intention to Work from Home	Do Not Tend to Work from Home
Teleworkers within the V4 territory	80.2%	19.8%
Foreign non-EU nationality teleworkers	33%	67%
National V4 countries teleworkers	87%	13%

The results confirmed that V4 national workers intend to work from home in the future (overall intention mean = 4.5, p value for one sample T-test = 0.01 < α = 0.05); meanwhile, the overall intention among foreigners to work from home is below the middle of the scale (M = 2.4, p value = 0.00 < α = 0.05), leading to the conclusion that foreign non-EU citizen workers within V4 countries do not tend to work from home in spite of their satisfaction with their teleworking experience during COVID-19 lockdown. To interpret this result, a further analysis conducted on the intention and fears of losing jobs in case of working from home using a correlation test. The results in Table 5 show a strong negative relation (r = -0.883, p = 0.001 < α = 0.05) between fear of losing jobs and V4 non-EU resident workers' intention to work from home; the relation is considered strong when Pearson's correlation coefficient exceeds 0.6 depending on the relations' strengths guidance, as suggested by Evans (1996).

Table 5. Correlations between V4 non-EU resident workers' fears of losing job in case of working from home and their intention to work from home.

Correlations							
Fear of Losing Job Overall Intention							
	Pearson's Correlation	1	-0.883 **				
Fear of losing job	Sig. (2-tailed)		0.001				
	N		130				

^{**} Correlation is significant at the 0.01 level (2-tailed).

Another independent samples T-test was conducted between workers' genders and intention to work from home. Table 6 shows no meaningful difference between the two genders in their intention to work from home in the future as the p value for all tests > α = 0.05.

Table 6. Independent samples tests for V4 countries workers' future intention to work from home	Э,
case females vs. males.	

Independent Samples Test							
		Levene's Equality o	T-test-for-Equality of Means				
		F	Sig.	Sig. (2-tailed)			
Intention to work from home within V4 countries.	Equal variances assumed	1.065	0.304	0.412			
(female/male)	Equal variances not assumed			0.741			

5.4. The Relation between Workers' Satisfaction with Telework Experience and Intention to Work from Home in the Future

A correlation test conducted between workers' intention to work from home in the future and their satisfaction with their working from home experience for national and foreign non-EU workers within V4 countries. Table 7 shows a strong positive relation between national workers' satisfaction and their intention to work from home in the future $(r = 0.798, p = 0.001 < \alpha = 0.05)$.

Table 7. Correlations between V4 national workers' overall satisfaction with working from home experience during COVID-19 lockdown and their intention to work from home in the future.

Correlations								
		Overall intention of V4 national workers to work from home in future	Overall Satisfaction of V4 national workers with teleworking experience					
Overall intention of	Pearson's Correlation	1	0.798 **					
V4 national workers to work from home in future.	Sig. (2-tailed)		0.001					
	N		293					

^{**} Correlation is significant at the 0.01 level (2-tailed).

Looking at Table 8, evidently, there is no meaningful relation ($p = 0.224 > \alpha = 0.05$) between foreign non-EU nationality workers' satisfaction and their intention to work from home in the future.

Table 8. Correlations between V4 non-EU resident workers overall satisfaction with working from home experience during COVID-19 lockdown and their intention to work from home in future.

Correlations								
		Overall satisfaction of V4 non-EU resident workers with working from home	Overall intention of V4 non-EU resident workers to work from home in future					
Overall Satisfaction of V4 non-EU resident Workers with	Pearson's Correlation	1	0.142 **					
working from home experience during	Sig. (2-tailed)		0.224					
COVID-19 lockdown	N		130					

^{**} Correlation is significant at the 0.01 level (2-tailed).

From the above two correlation tests, it is easy to conclude that the increase in satisfaction with telework is accompanied by an increase in a future intention to work from home

for national CE workers. As a result, the first hypothesis of this study, H1, is accepted and confirms that "Satisfaction with their work from home experience impacts national workers' intention to work from home in the future". Meanwhile, the satisfaction of non-EU citizen workers does not correlate with the future intention to work from home. This may derive from the fear of losing jobs and residency, as shown by the results and discussions of Table 5. As a result, the second hypothesis of this study, H2, is rejected as there is no significant impact of foreign workers' satisfaction with their working from home experience on their intention to work from home in the future.

Summarizing all the above results shows that Central European workers were satisfied with their working from home experience, with no significant difference found between citizens and non-EU workers' satisfaction with working from home, nor between females and males. Meanwhile, there is a difference between citizens and non-EU workers' intention toward working from home in the future, as non-EU workers in V4 countries have a distinguished negative intention toward working from home in the future if they have the chance in spite of their satisfaction of their teleworking experience relating to a fear of losing their jobs and their residence permits in sequence, whereas national citizens have a positive intention toward working from home in the future if they have an opportunity to.

Additionally, in CE countries, there are no significant differences between female and male workers in their future intention to work from home.

6. Conclusions

A deep reading of the above discussions and results shows that although workers in Central European countries were generally satisfied with their working from home experience, their satisfaction was not always reflected in increasing their intention to work from home: where the intention of national workers to work remotely increased with their satisfaction of their teleworking experience, foreign non-EU workers' satisfaction was not vital enough to increase their intention to work from home, which stayed low at only 33%. This result is correlated strongly with foreign non-EU workers' fears of losing their work and, in sequence, their residence permits in the European Union as they believe that CE governments may find no need for workers who work remotely to stay in EU territory as they can deliver their work remotely. This drives the research to predict the existence of a legal problem which has not been revealed or thoroughly discussed concerning the legal situation of working from home within EU territory for some non-EU workers relating to their rights to exist in the EU, since work can be delivered online from anywhere in the world, thus the need of workers' physical existence in EU territory may not be justified anymore.

From another perspective, this research found that the most dominant factor in increasing satisfaction with remote work for both genders is the possibility of allocating the time saved by working from home to be spent with family, friends, and self-relief (social–personal time). In the same context, the most important cause of dissatisfaction is the inconvenience which derives from the technical problems the employee has to deal with during working from home.

Another important conclusion of this study is that males who work from home are disattisfied with the blurred lines separating work from private life and the distraction of work caused by home residents more than the extra cost of using their own ICT, signaling that they prefer privacy and focusing on their job more than money, whereas females demonstrate more objections to the additional cost of using their own ICT more than the negative effects on their private life and focusing on their job. Similarly, males appreciate the time gained from cutting their commuting time more than cost reduction which results from working from home, which is the opposite of females who are more satisfied with cost reduction compared to cutting their commuting time.

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7. Implications and Future Research Directions

One of the important benefits of this research is shedding the light on a problem that might face foreign residents within the EU who have work permits when their employers encourage them to work from home, as the legal argument that justifies their existence on EU territory may be weak as well if they can deliver their work remotely. In this context, it would be good for legal institutions to start an early discussion of the legal situation of working from home as it is a growing work model and likely to be a dominant work paradigm in the future.

Additionally, in regard to the previous studies of the authors focusing on measuring the age impact on implementing and using ICT applications in users' utilization of online services, it is important to complete the image by studying the impact of age on teleworkers' satisfaction and intentions to keep working from home regarding the difficulties facing the older generation in using online tools and the complications related to increased security and privacy procedures in the virtual environment (Alassaf et al. 2020a, 2020b; Alassaf and Szalay 2022).

Additionally, in the context of the literature discussion presented by this study regarding the distractions that may occur during working from home emerging from family members or roommates' existence around the inability to allocate sufficient work space or affording reliable ICT tools and internet connection, the authors of this research propose conducting further research concerning satisfaction, intention, and attitude toward working from home given the effect of exogenous home working environment factors, distinguishing between two genders, marital status, and the existence of children.

The authors of this research have planned to expand this research in regard to worker age and the exogenous factors of the impact of the working from home environment on satisfaction, intention, and attitude toward teleworking, taking into regard the gender differences in response to these factors.

It may be useful for researchers to conduct this same research in future but for an expanded research society beyond each of the Visegrád countries.

8. Limitation

The results may be exposed to biases because the questionnaire was distributed in the capitals of the V4 countries, which lacks the opinions of workers in rural areas and smaller cities.

Additionally, the data collected in a specific short period of time which, according to Podsakoff et al. (2003), may subject data to common method biases since the data have been gathered in a single point of time.

According to Hogg et al. (2018), who recommended the minimum sample for statistical analysis by 20–30 cases, this research has consented to this recommendation for any standalone analyzable sub-population with a minimum number of cases, with 31 cases of foreign non-EU workers within the Czech Republic, as well as 31 cases in Slovakia, but it is more desirable for researchers to expand those samples for more reliable generalization of the results when analyzing the data of each country alone. This shortcut prevented the study from carrying out a deep, highly reliable analysis of each of V4 countries independently.

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Appendix A. Descriptive Analysis. Satisfaction and Dissatisfactions Motives of Working from Home among Foreign Non-EU and National and Genders within V4 Countries

			V4 Cou	ıntries				
Satisfaction	Cause/Motive	Foreign	Workers	Nationa	National Workers		Vorkers	
Sutisfuction	Cause, Work	Females	Males	Females	Males	Females	Males	
	Time for family, friends, or self-relief	24	20	70	53	94 55.6% of satisfied working females	73 38.8% of satisfied working males	
	Both genders	46.3% of sati	4 sfied foreign kers	46.9% of sat	123 isfied national orkers		167 isfied workers	
Satisfied	Reduction costs	10	12	30	36	40 23.7% of satisfied working females	48 25.6% of satisfied working males	
	Both genders	2	2	25.2% of sat	66 isfied national orkers		88 isfied workers	
	Eliminating of commuting time	9	20	0 26 47	47	35 20.7% of satisfied working females	67 35.6% of satisfied working males	
	Both genders	30.5% of sati	9 sfied foreign kers	73 27.9% of satisfied national workers		n 27.9% of satisfied national 28.6% of satisf		102 isfied workers
Σ		43 72.9% of foreign worker females	52 73.2% of foreign workers males	126 88.1% of foreign worker females	136 90.7% of foreign worker males	169 83.7% of worker females	188 85.1% of worker males	
		95 responde foreign v	ents (73% of workers)		lents (89.4% of l workers)	357 respondents (84.4% of respondents)		
	Extra cost of using internet, and using personal ICTs tools	5	4	7	1	12 36.4% of unsatisfied working females	5 15.2% of unsatisfied working males	
	Both genders	25.7% of unsa	9 8 25.7% of unsatisfied foreign 25.8% of unsatisfied national workers workers 25.7%		25.7% of unsa	17 atisfied workers		
Not satisfied	Occupying space in residential place	-	1	-	1	-	2 6.1% of unsatisfied working males	
	Both genders	2.9% of unsat	l tisfied foreign kers	1 3.2% of unsatisfied national workers		2 3% of unsatisfied workers		
	Distraction from existence of children, a spouse, resident mate	1	4	3	3	4 12.1% of unsatisfied working females	7 21.2% of unsatisfied working males	

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			V4 Cou	ıntries			
Satisfaction	Cause/Motive	Foreign	Workers	National Workers		All Workers	
Satisfaction	Cause/Monve	Females	Males	Females	Males	Females	Males
	Both genders	5 14.3% of unsatisfied foreign workers		19.4% of unsat work	isfied national	11 16.7% of unsatisfied l workers	
	The blurred line between personal life and work	2	3	1	5	3 9.1% of unsatisfied working females	8 24.2% of unsatisfied working males
	Both genders	,	5 tisfied foreign kers	19.4% of unsat wor	isfied national	16.7% of unsa	11 atisfied national orkers
	Inconvenience of technical problems	8	7	6	4	14 42.4% of unsatisfied working females	11 33.3% of unsatisfied working male
	Both genders		5 tisfied foreign kers	10 32.2% of unsatisfied national workers			25 atisfied workers
~		16 27.1%	19 26.8%	17 11.9%	14 9.3%	33 16.3%	33 14.9%
Σ			ent (27% of worker)	31 responder national			ents (15.6% of ondents)

		Cze	ch Republic				
Satisfaction	Cause/Motive -	Foreign Workers		National Workers		All Workers	
		Females	Males	Females	Males	Females	Males
	Time for family, friends, or self-relief	9	8	14	14	23	22
	Both genders	17		28		45	
Satisfied	Reduction costs	2	2	6	5	8	7
	Both genders	4		11		15	
	Eliminating commuting time	2	4	4	8	6	12
	Both genders	6		12		18	
		13	14	24	27	37	41
Σ						78 respondents (85% o Czech workers)	
	Extra cost of using internet, and using personal ICT tools	1	1	2	-	3	1
	Both genders	2		2		4	
	Occupying space in residential place	-	-	-	-	-	-
	Both genders	-		-		-	
Not satisfied	Distraction from existence of children, spouse, resident mate	-	1	3	2	3	3
	Both genders	1		5		6	
	Blurred line between personal life and work	-	1	1	2	1	3
	Both genders	1		3		4	
	Inconvenience of technical problems	-	-	-	-	-	-
	Both genders						
		1	3	6	4	7	7
Σ						14 respondents (15% of Czech workers)	

			Hungary					
Satisfaction	Cause/Motive	Foreign Workers/Female, Male		National Workers/Female, Male		All Workers in the Count		
		Females	Males	Females	Males	Females	Males	
	Time for family, friends, or self-relief	6	5	25	20	31	25	
	Both genders	11		45		56		
Satisfied	Reduction costs	1	2	7	9	8	11	
	Both genders	3		16		19		
	Elimination of commuting time	3	4	10	15	13	19	
	Both genders	7		25		32		
		10	11	42	44	52	55	
Σ						107 respondents (81% of Hungarian workers)		
	Extra cost of using internet, and using personal ICT tools	1	1	2	-	3	1	
	Both genders	2		2	1	4		
	Occupying space in residential place	-	1	-	-	-	1	
	Both genders		1	-			1	
Not satisfied	Distraction from existence of children, spouse, resident mate	-	1	-	-		1	
	Both genders		1	-			1	
	Blurred line between personal life and work	-	1	-	1			
	Both genders		1 1		2			
	Inconvenience of technical problems	6	4	4	3	10	7	
		10		7		17		
		7	8	6	4	13	12	
Σ							ents (19% of n workers)	

			Poland				
Satisfaction	Cause/Motive	Foreign Workers/Female, Male		National Workers/Female, Male		All Workers	
Satisfaction		Females	Males	Females	Males	Females	Males
	Time for family, friends, or self-relief	4	4	15	10	19	14
	Both genders	8		25		33	
	Reduction costs	3	5	9	10	12	15
Satisfied	Both genders	8		19		27	
	Eliminating of commuting time	2	6	8	11	10	17
	Both genders	8		19		27	
		9	15	32	31	41	46
Σ						87 responde Polish v	nts (86.2% of vorkers)
	Extra cost of using internet, and using personal ICT tools	1	-	1	1	2	1
Not satisfied	Both genders	1		2		3	
	Occupying space in residential place	-	-	-	1	-	1
	Both genders			1		1	

			Poland				
Satisfaction	Cause/Motive	Foreign Workers/Female, Male		National Workers/Female, Male		All Workers	
		Females	Males	Females	Males	Females	Males
	Distraction from existence of children, spouse, resident mate	1	1	-	-	1	1
	Both genders	2				2	
	Blurred line between personal life and work	1	1	-	1	1	2
	Both genders	2		1		3	
	Inconvenience of technical problems	1	2	1	1	2	3
	Both genders	3		2		5	
		4	4	2	4	6	8
Σ		14 respondent (1 Polish work					ent (13.8% o vorkers)

			Slovakia					
Satisfaction	Cause/Motive	Foreign Workers/Female, Male		National Workers/Female, Male		All Workers		
		Females	Males	Females	Males	Females	Males	
	Time for family, friends, or self-relief	5	3	16	9	21	12	
	Both genders	8		25		33		
Satisfied	Reduction costs	4	3	8	12	12	15	
Satisfied	Both genders	7		20		27		
	Eliminating of commuting time	2	6	4	13	6	19	
	Both genders	8		17		25		
	<u> </u>	11	12	28	34	39	46	
	Σ						oondents (86.7% of vakian workers)	
	Extra cost of using internet, and using personal ICT tools	2	2	2	-	4	2	
	Both genders	4		2		6		
	Occupying space in residential place	-	-	-	-	-	-	
	Both genders	-		-		-		
Not satisfied	Distraction from existence of children, spouse, resident mate	-	1	-	1	-	2	
	Both genders	1		1		2		
	Blurred line between personal life and work	1	-	-	1	1	1	
	Both genders	1		1		2		
	Inconvenience of technical problems	1	1	1	-	2	1	
	Both genders	2		1		3		
		4	4	3	2	7	6	
	Σ					13 responde Slovakiar	nts (13.3% o	

Appendix B. The New Scale Developed by This Research to Measure Workers' Satisfaction with Working from Home

- 1. You were able to work through the medium of an online teleworking connection.
- 2. You were stimulated to conduct additional efforts or research on the assigned tasks through the online teleworking connection.

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3. You put a great deal of effort into learning the working from home system to participate in telework.

- 4. You were satisfied with your learned experiences through the teleworking communication system.
- 5. You were satisfied with the support you received through the teleworking communication system.
- 6. You were satisfied with the feedback you received about your teleworking performance.
- 7. You were satisfied with using ICT tools for teleworking.
- 8. You achieved your tasks using ICTs tools.
- 9. Working from home helped you to improve your performance.
- 10. You were happy with the tasks you did when working from home.
- 11. You were satisfied with the number of tasks you were asked to do when working from home.
- 12. You were satisfied with your working hours when working from home.
- 13. When working from home, you were satisfied working without the equipment that was provided by the conventional office.
- 14. You were satisfied with the tele relation with your working from home co-workers.
- 15. You were satisfied with your tele relation with your work superior.
- 16. You were satisfied with your salary paid when working from home.
- 17. You were satisfied with the work from home environment related to being interrupted by others: children, spouse, roommates, etc. (reversed coded).
- 18. You found real enjoyment in the working from home experience.
- 19. Working from home was a useful working experience.
- 20. You would recommend working from home to others.

Note

33% of foreign non-EU workers in V4 countries have the intention to work from home in future the (43 respondents).

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