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This research applied both a qualitative and quantitative methodology and was developed using statistical data collection and a thorough literature review related to the topic. As a primary data collection tool, a structured questionnaire was applied to 400 people from a specific population. This was to inquire about the technological platforms used in remote work and measure productivity, the perception of change in functional roles, processes which can be automated, and key variables related to the characteristics of the future of work.

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The results demonstrate a broad characteristics, opportunities, and trends into the future, the relevance of working remotely and the main contributions of telecommunications equipment. Finally, a series of recommendations are made to provide tools for financial companies to deal with the changes in the future of the work. Additionally, this research contributes to increasing the access of Small and Medium Enterprises (SME) to financial services including affordable credit, and their integration into value chains and markets.

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I. Introduction

Working from home has been improving the quality of work peoples' life. Some of the main advantages of teleworking are energy saving, day to day cost saving, protection of environment, facilitation of job mobility and companies could reduce overheads and property fees (Vayre, 2021). All these situations represent a huge impact in the way many industries operate, some of them represent a big step forward regarding climate change impact for example, the pandemic has positively impacted environment and helped to re-think if many of production and operating costs are truly necessary.

Examples of this are transportation costs, office rental expenses, utilities costs, parking expenses among others that for years were part of many organizations budgeting. This crisis has revealed that these items might not be that necessary and that resources must be focus on connectivity, technology, human capital benefits, and others matters.

According to McKinsey Global Institute (2020) there is a high probability that hybrid models remain in the industry after the pandemic, it is most likely to fit with a portion of work force with high level of education and with higher salaries and benefits.

This statement offers us a clear view that things might not be the same than before, more and more companies will adopt these hybrid models, beginning with most qualified and professional employees, but in long term, companies will look for the way to make the most possible procedures remotely and try to get the less physical interaction in their companies. Of course, this will be suitable for some industries only, other will remain needing their collaborators in place but automation and technology will lead to changes in these industries such as manufacturers, tourism, food, and others.

The future of work is based on the role of technology and automation. The future employees must increase their technical knowledge to learn a new talent and adapt to the development of the new era and consider being competitive in the service industry. The World Economic Forum (2020) affirms that labor markets were transformed in the emerging economies due to technological changes and tendencies, and this scenario will remain in the future in a faster and deeper way.

Technology and automation such as streamlined collaboration and remote work have been improving efficiency and productivity. Today's technology services are essential for financial service industry success and continuity (Brem, Viardot & Nylund, 2021). It provides effective communication and increases flexibility in companies, and people that are working from home or traveling for work around the world. Telecommunications, digital media, and automation systems are improving customer service as well. With these tools, organizations can identify and analyze customer data, surveys, statistics and more to

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develop or create better solutions for the customers (Arribas, 2020).

Additionally, it is important to mention that all the described items involved in this research are related to the fulfillment of the Sustainable Development Goals, specifically with Goal 9 that includes the development of industry, innovation, and infrastructure. Considering that Costa Rica is a signatory of the 2030 Agenda for Sustainable Development, this research is aimed at describing the main variables that characterize the future of work in the Costa Rican financial service industry in a post-COVID-19 scenario. Additionally, the knowledge generated from this study contributes to increasing the access of small industries and other businesses, to financial services, including affordable credit, and their integration into value chains and markets. Thus, creating more resilient financial organizations that can continue to provide their services.

With the results of this investigation, financial service organizations will have valuable information regarding how their operation will be like in the near future, and how trends and opportunities will impact the way they do things today. As mentioned before, this makes it easier for financial institutions to be prepared for further changes.

II. Methodology

a) Investigation type

The research carried out is exploratory with a quantitative and qualitative approach, since it uses statistical data collection and analysis techniques, as well as qualitative elements related to primary sources of information on the central theme of the research. Through the quantitative approach it was possible to obtain information about the main variables that characterize the future of work in the Costa Rican financial service industry in a post-COVID-19 scenario. It should be noted that this approach allows to eliminate biases in the research process, since it is possible to complement the bibliographic review with the responses of the selected target population.

b) Population of interest

According to the Instituto Nacional de Estadística y Censos as of December 30, 2020, the number of people working in the financial service sector totals up to 40,535 employees. For the purpose of this research, it will be taken as part of the target population every adult, of any gender and age, working for one of these organizations and have had the opportunity to work remotely during the COVID-19 crisis.

c) Sample and sampling type

For the calculation of the sample of this investigation, a margin of error of 5% and a confidence level of 95% were used which results in a sample of 382 people. However, 400 responses were received and analyzed. The type of sampling used for this research is directed and non-probabilistic, since it is subject to the decision-making of the researcher and the selected sample is related to the research criteria described above.

d) Instruments and data collection techniques

A structured questionnaire was designed with 17 questions where 14 of those questions have a quantitative nature and the remaining three questions have a qualitative nature. The questionnaire was elaborated using Microsoft Office Forms platform and distribute to the participants via social media like WhatsApp, Email, and Facebook. The closed questions were intended to quantify key variables related to the main variables that characterize the future of work in the Costa Rican financial service industry in a post-COVID-19 scenario. The objective of the qualitative questions was to investigate the technological platforms used in the organization to do telework and measure productivity, also there is a question regarding the personal perception of the respondent about the possible transformations of tasks and processes into automated ones.

III. Results

The demographic characteristics of the surveyed population are summarized as follows: 60% identify themselves as female, 39% with male and 1% with another gender. Regarding age ranges, Figure 1 shows the distribution in different age ranges, most of the respondents are between 35 and 45 years old (33%) followed by 30% who are between 30 and 35 years old.
Regarding the geographic location where the respondents work, 60% are concentrated in the province of San José, 14% in Heredia, 10% in Alajuela, 8% in Cartago, 5% in Guanacaste and 3% remaining in the provinces of Limón and Puntarenas.

Continuing with the relevant data of the study, and as part of the objective of investigating the relevance of telework in the financial industry of Costa Rica, the number of days of preference that respondents want to telework was consulted. In Figure 2 the detailed results are shown.

When asked about whether they consider that they have the necessary resources to carry out teleworking from home effectively, 86% of those surveyed affirmed that they do, and 14% indicate that they do not have the conditions to do so. Along the same lines, the frequency with which people who telecommute communicate with their work team was investigated. Figure 3 shows the results on this frequency.
As part of the attributes of this work modality, the perception of whether teleworking has increased the time available to attend to their family tasks and responsibilities was consulted, to which 74% of the respondents answered affirmatively and 26% indicated no. To identify the main contributions of telecommunications and digital media in the continuity of the operations of the financial services industry, we consulted about the technological platforms that people who telework use to communicate with their work team. Table 1 shows their distribution.

Table 1: Platforms used for communication

<table>
<thead>
<tr>
<th>Through which technology platforms do you communicate with your work team?</th>
<th>% of respondents who say they use the tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teams</td>
<td>65.56%</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>26.67%</td>
</tr>
<tr>
<td>Zoom</td>
<td>25.56%</td>
</tr>
<tr>
<td>E-mail</td>
<td>25.19%</td>
</tr>
<tr>
<td>Skype</td>
<td>13.33%</td>
</tr>
<tr>
<td>Phone calls</td>
<td>7.04%</td>
</tr>
<tr>
<td>Webex</td>
<td>4.44%</td>
</tr>
<tr>
<td>Others</td>
<td>18.15%</td>
</tr>
</tbody>
</table>

In figure 4 it can be observed that 236 respondents indicated that the greatest benefit acquired by teleworking was the reduction of personal expenses, followed by the greater flexibility of schedules being a 'lower stress level' the lowest advantage of teleworking perceived by the participants.
Figure 5 shows important information about the main disadvantages of teleworking: 40% of the respondents have identified the absence of social interaction as the number one, followed by a 24% who believe that the working hours have been extended, and a 20% who considered important the emotional disengagement.

![Disadvantages of teleworking](source: Own elaboration)

Another important factor that the research helped us to find out was if the organizations of the financial industry of Costa Rica are evaluating the productivity of the collaborators who perform telework. Figure 6 shows that 19% of the population indicates that they are evaluated while 81% indicates that they are not.

![Technological systems used to evaluate productivity in organizations](source: Own elaboration)

Continuing with the objectives of the study, another objective was to identify if companies are using new technologies, systems, or applications to measure the productivity of their employees to contribute with business continuity. According to the data obtained, figure 7 shows that 81% of the respondents did not answer, however 7% indicated they are using software to measure productivity, followed by 5% who make manual reports.
To identify the existence of processes or functions that can be automated in Costa Rica’s financial organization, this question was included in the survey and the data obtained shown in figure 8 is that 53% of the population consider that there are no processes that can be automated in their companies, while the remaining 47% indicate that there are.

As part of the research on the processes that can be automated, relevant information was obtained about the functions or tasks that organizations can improve by automating them. Most respondents (51.47%) did not answer, followed by 25.74% indicating that administrative processes can be automated as shown in figure 9.
Figure 9: Tasks/processes can be automated in your organization.

The study also considered if people were aware about any existence of an increase in cyber-attacks or fraud in their organizations to continue with the objective of investigating the relevance of telecommunications, digital media, and business continuity. The figure 10 shows that 26% of the surveyed population consider that they had an increase, while 74% considered that there were no fraud or cyber-attacks in their organizations.

Figure 10: Perception of cyber-attacks or fraud increase in workplace.

Another important objective considered in the research was to determine if the organizations in the financial industry in Costa Rica conduct training for their employees in cybersecurity, fraud prevention and business continuity topics. The study reveals that 33% of the surveyed population has never been trained, while the other 54% indicated that they were trained last year, and the rest received at least one training more than a year ago.
IV. DISCUSSION

We want to highlight the relevance that our respondents indicate about their preference when teleworking, most of them mention that they have a high willingness to work from home. This element is very important due to the relevance that teleworking has taken for both companies and individuals. Before the pandemic, this was a very unknown situation for companies in our country and the financial industry was no exception. There was a lack of knowledge and little familiarity about this type of work, it was the transnational companies that began to popularize this mechanism that little by little and in the context of the pandemic spread to the rest of the industries. According to Barquero (2020) teleworking was not implemented for only 3% of existing national and multinational organizations in Costa Rica, remaining 97% has developed teleworking in their organization as part of the business continuity strategy due to the social distance requirements and moving restrictions across the country.

The teleworking modality represented a challenge for many organizations during the year 2020 and continues to this day, especially on how to address the risks related to this modality from a technological, operational and information security risk standpoint. Much resilience has been demonstrated regarding certain processes, and others have had to adjust during the process of isolation and remote work of collaborators, there is no doubt that today there is a new normal in which organizations operate globally (Vasic, 2020; Vayre, 2021).

This "new" way of operating financial organizations is supported by the fact that respondents have confirmed (86%) that they have the necessary resources to effectively work from home, this undoubtedly denotes that employees and organizations have both technological and economic resources to adapt spaces and platforms to continue working remotely. Today almost in every home in Costa Rica, families have adapted a place or location in their houses to work, study or attend other remote sessions such as meetings, video conferences, etc. This scenario demonstrates that virtuality has come to stay, and that people have adopted progressively the idea that many of their interactions with groups of people can happen without getting out of their place.

In another similar report for the newspaper La República, Barquero (2020) highlights that with the pandemic, the number of teleworkers in the country went from 21,524 in September 2019 to 282,632 in the same period of 2020. This information was reported in the Continuous Employment Survey of the INEC, meaning a total growth of 1,213% from one year to another.

According to Brem et al. (2021), the entire world is changing, and each country lives it at its own level, effectively COVID-19 accelerated the adaptation to innovation in processes, techniques, and technologies for the financial industry sector in Costa Rica, including telework. This comes as a solution to the global crisis and as a method of security for the population. Telework is in constant growth in the country and the first sectors where this new way of working has been adopted are telecommunications, insurance, and finance. The research carried out shows us interesting data about the financial sector of Costa Rica regarding how respondents visualize the disadvantages and advantages of this new modality.

One of the main advantages indicated by most respondents, 236 people to be exact, was the reduction of fixed costs that they could perceive and consider that
this even helped to have a better economy and balance on family life. According to the Ministry of Health of Costa Rica (2021) in the scenario of the pandemic, teleworking is offering advantages for both the employee and organizations and even for society, which translates into a cost-benefit for each of the parties. Is important for Costa Rica to start this discussion based on the results obtained from the health crisis, because we think it is a great opportunity to change and improve procedures not only in the private sector but in the public one, activities carried out have to have an efficient use of resources, including the ones related to human capital and technology.

Following the same line of teleworking, most respondents affirm to have daily contact with their work teams (55%) while 41% indicate that they have it 2 to 3 days a week, these results highlight that it is important for financial companies to maintain communication channels within the organization and the need to replicate the levels of interaction that were having in a face-to-face environment. This effort by organizations to maintain internal communication responds to what Arribas (2020) qualifies as one of the adverse effects of teleworking. The author further mentions that to maintain compromise and engagement within the organization internal communication must be increased. To do so companies must take advantage of collaboratives platforms to encourage teamwork, discussions, and informal sessions; this will help improve communication and commitment maybe.

We consider that the absence of communication compromises the objectives of financial companies that are teleworking, for this reason it is of extreme importance to keep this volume of communication high as long as it is productive and open. In this effort to support communication channels in financial companies, the study shows the high use of collaborative tools such as Microsoft Teams. According to the results of the survey, this tool is used by 65% of the respondents, these data from Costa Rica do not escape the global trend of its use in the world. According to Herranz (2020), Microsoft affirms that it has had a 50% increase in the number of users in 2020, reaching the record figure of 115 million users in the world.

At this point, it is essential to highlight the role of information technology as an ally of the financial business to provide continuity to operations. The technological investment of companies has increased substantially in the last year and budgetary items have even been created for the implementation of this type of platforms, making it clear that financial services must be progressively digitized and strengthen information risk control processes to prevent information loss and technological fraud.

Also, we inquired about training exercises for personnel. When dealing with risk management in a dynamic and changing exercise, it is very important to keep employees updated on these issues to reinforce the organization’s preventive controls. When asking about whether financial companies have provided training in fraud prevention, business continuity, cybersecurity or similar, about half of the respondents (46%) agreed that they have never received training or have more than one year without attending to any training sessions.

Keeping the staff of an organization updated and trained on these aspects translates into an improvement in internal control that allows mitigating risks that may arise from external and internal threats. This helps making the organization’s risk culture stronger, bearing positively on daily decision making. Leaver & Reader (2017), Carretta et al. (2017) & Deloitte (2012), states that risk culture is a very important indicator to measure how well risk management is driven across the organization, and how well the employees adopt the associated policies and procedures.

Another important discovery in this study relates to how productivity is being measured for those who are working remotely. Barquero (2020) in a note for the newspaper La República refers to a study called “Telework: Did it come to stay?” of the firm Search Latin America, where it is evidenced that 74% of workers have the tools to carry out their work from home, however, 66% of companies say they do not have the appropriate tools and procedures to evaluate their performance. This situation is replicated in this study where 81% of the respondents affirmed that in the organizations where they work, they do not have any system or procedures to evaluate their productivity.

We consider that what is not possible to measure is difficult to control, therefore, the productivity levels of the different areas of the company must be aligned with the strategic objectives of the organization, so that they contribute to its integral development. In the absence of information on its performance, it is not possible to make decisions for the improvement and optimization of the processes that are part of its business model. It is essential that the strategy and its objectives permeate at all levels in the organization. Additionally, they must be integrated into the operational plans and the operations strategy which is of greater scope and understanding by the collaborators, since it involves the daily processes, they know and perform.

This issue is a critical point that Costa Rica’s financial industrial organizations must manage due to the importance of maintaining adequate performance results. This situation, plus the degree of uncertainty that exists about how long the pandemic will last or even if teleworking will be a modality that will last over time, represent very important challenges that companies must address in the short term. In this regard, Van, Murat & Sousa (2020) state that hybrid models have
come to stay in the new normal, people will have to get used to this trends that have transformed the way things are done. The winners will be those companies managing the risks coming from remote working modality (technological, cybersecurity, business disruption and others).

However, this new reality is also aligned with innovation, automation, new ways of working and how it helps to improve the way in how communication takes place to continue working in the middle of a global crisis, also it comes to help families and their ways of communication with their relatives even when those are inside or outside the country.

Cutting edge technology nationwide is a model of development that came to stay and generate opportunities for improvement in our work and family life; according to the study conducted, the percentage of people who did not want to provide information about how their organizations are adapting to innovation was considerable (81%). This suggests that in Costa Rica it is clear that people continue showing resistance to changes technology wise which will have a considerable impact as for a developing country, organizations in Costa Rica need to find better ways to adapt to innovative processes, products, concepts and others to fulfill existing needs.

According to the CINDE (2021) Costa Ricais catalogued as a multifunctional business destination, where many multinational companies has settled their service centers. Nowadays, Costa Rica offers more than one hundred different processes and activities in more than twelve different languages. Technical support, human resources, accounts payable, accounting and others are the most common professional activities performed by Costa Rican workforce, placing our country as the perfect location to improve organizational structure and digital transformation.

It can be highlighted with this information that Costa Rica is a country where the evolution towards cutting-edge technology at the level of services, goods and products has placed it on the radar of many countries that need to adapt to the digital transformation. Costa Rican organizations must take into consideration that the digital transformation is already happening, and it will remain, and it is a must to seek how to align the current strategies to this transformation and be part of the change and not victims of it.

The results and discussion presented reveal very important elements on the variables that characterize the future of work in the financial industry in our country, as well as the main contributions that technology and telecommunications have made on this matter and the opportunities and threats of the future of work in the Costa Rican financial service industry in a post-COVID-19 scenario. Based on these results, the conclusions and recommendations of this research project are detailed below.

V. Conclusions

The capacity to adjust and adapt to new trends is very important because the financial sector is a dynamic axis of the economy and is fundamental for the growth and development of the country. In addition, this sector is crucial for the country’s small and large industries to have access to working capital that allows them to improve their production processes. On the other hand, it is responsible for providing tools to satisfy the debt and investment needs of both individuals and the country’s business sector, thus meeting their short and long-term requirements.

As a result of this research, it is possible to establish the main variables that characterize the future of work in the country’s financial industry. These characteristics are the remote mode, either from homes or specialized centers for teleworking, the continuous use of collaborative technological tools, a higher level of technological risk in the management of work and human capital (due to the increase in cyberattacks, fraud, among others) and emerging trends towards process automation.

Technology through telecommunications and digital media are the tools that have supported financial companies to give continuity to their operations in this pandemic. The technological investment of companies has increased substantially in the last year, allocating resources for the implementation of collaborative platforms and connectivity. Companies need to improve their information risk control processes to prevent information loss and technological fraud.

Among the opportunities presented by the future of work in this industry is an improvement in the quality of life of people, this because there is a strong tendency for teleworking to be a permanent modality, since people consider that they have enough tools to do it and at the same time employees have agreed that teleworking has increased the time available to cope with their tasks and family responsibilities. This last point has a direct impact on improving people’s quality of life, for which we consider that this change represents an important opportunity for both employees and companies, since this modality helps to improve the level of commitment and motivation.

Based on the study, it is possible to determine that most of the financial companies in Costa Rica have implemented the teleworking modality, however, based on the research, not all companies have platforms for connections to secure networks, collaborative tools, and other technological elements for its safe implementation. This represents a challenge for companies that want to protect their assets and information from cybercriminals and fraudsters.
Carry out training: Companies in the financial sector should carry out constant training exercises for their collaborators, since people constitute a relevant sector should carry out constant training exercises for potential problems that may affect the work communication system because it helps to identify recommendation also improves the internal that arise from the remote mode of work. This collaborator must be available, the form and type of meetings that are established, among other elements that arise from the remote mode of work. This recommendation also improves the internal communication system because it helps to identify potential problems that may affect the work environment. Based on the problems identified, it is proposed to develop a plan of changes and improvements at the different levels of the organization (when necessary) managed by the Human Resources department, this with the aim of having a formal process of capturing the voice of the collaborators.

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