

Teleworking and its Effect on SMEs in Barranquilla

Kelly Jonaha Gúzman Doria¹, Javier Antaquera Ripoll², Mónica Isabel Herazo Chamorro³,
Liliana Álvarez Ruíz⁴, Julio Ordoñez Rico⁵

Abstract

Teleworking has experienced significant growth worldwide, changing the way companies operate and employees perform their tasks. Therefore, this research aims to analyse the effects of teleworking and its contribution to economic growth in the business development of SMEs in Barranquilla. The methodology of the research is quantitative-descriptive, where the instrument was a questionnaire of own design called "effects of telework and its contribution to economic growth in business development of SMEs" the study population were 78 entrepreneurs who run SMEs in the city. Among the results, it was found that half of the population (52.6%) of entrepreneurs have a positive perception of teleworking, however, after the pandemic, only 21.8% continued with teleworking, of which 100% consider that this form of work has had benefits in the development of the company. It can therefore be concluded that despite the positive perception of telework, there are significant challenges and opportunities in its implementation.

Introduction

In Colombia, Law 1221, which defines and regulates telework, was enacted in 2008, and in 2012 the Telework White Paper was published; a practical guide for private companies to adopt telework and reap its benefits. However, since the declaration of a global health emergency due to the HIV/AIDS pandemic more than a year ago, the term 'telework' has become known in many more settings and the law has become more relevant. Many companies, often ill-prepared and ill-informed, have had to adopt teleworking on a compulsory basis, which has been a major challenge in terms of work, communication, technology, the economy, the market, competitiveness, management and the productivity of companies, whatever their economic objective.

In 2020, teleworking in Colombia increased by 400% due to the pandemic. This was a vital solution for many companies to maintain their business operations and a means for employees to safeguard their health and that of their families while continuing to generate income.

To date, the MinTic has conducted a series of surveys that demonstrate the development and adoption of this modality by companies. The Colombian government has issued new decrees and legislation that address the gaps that have arisen due to the need to implement this modality promptly. This was something that more than 50% of employees in Colombia were unaware of, and something that many entrepreneurs considered to be a distant future for their companies.

Two years after the arrival of the pandemic, it is necessary to assess the long-term impact of remote work on productivity, economic growth, profitability, personnel development and market expansion in SMEs in Barranquilla. Alternatively, it is crucial to ascertain whether SMEs in Barranquilla are genuinely unprepared to adopt teleworking. This could be due to limitations in their business processes, inadequate technological development, or rigid managerial policies that hinder the adoption of novel work models. These policies

¹ Maneger Bando de Bogotá, Universidad Autónoma del Caribe, Email: kejojudo@gmail.com, <https://orcid.org/0009-0003-8650-8752>

² business administration program teacher, Universidad Autonoma del Caribe, Email: javier.antequera@uac.edu.co, <https://orcid.org/0000-0003-0835-5618>.

³ Bachelor's Degree in Early Childhood Education, Corporación Universitaria del Caribe CECAR, Email: monica.herazo@cecar.edu.co, <https://orcid.org/0000-0003-4193-8321>.

⁴ Founders room member, Corporación Universitaria del Caribe CECAR, Email: liliana.alvarez@cecar.edu.co, <https://orcid.org/0000-0002-8163-8879>.

⁵ Assistant director of research, artistic and cultural creation, Corporación Universitaria del Caribe CECAR, Email: julio.ordonez@cecar.edu.co, <https://orcid.org/0009-0003-8459-6664>

may be predicated on the belief that having staff in the office facilitates more stringent performance monitoring.

Teleworking in Colombia in 2020 and Beyond

In Colombia, the Ministry of Health and Social Protection declared a 'health emergency due to the COVID-19 coronavirus' (Resolution 385 of 2020), adopting measures such as 'mandatory preventive isolation of all persons living in' Colombia (Decree 636 of 2020). The initial health emergency was scheduled to end on 30 May 2020, but was extended through various resolutions until 30 June 2022 (Article 1, Resolution 666 of 2022). This led to restrictions on mobility and the size of crowds. In response, local authorities and companies established measures to allow people to work from home or remotely. Examples of this are the issuing of laws (Tamayo Ramírez & Plata Quesada, 2022) to regulate work at home (Law 2088 of 2021 and Decree 649 of 2022), remote work (Law 2121 of 2021 and Decree 555 of 2022), connectivity assistance for workers at home for the duration of the health emergency (Decree 771 of 2020), and other measures.

In 2017, a study was published at the Universidad Militar Nueva Granada, entitled Prospective Analysis of Telework in Colombia in 2020. This study used a prospective analysis method, proposed by Michel Godet, and looked at seven dimensions (organisational culture, economy, environment, technology, management systems, public policy and psychosocial). It found that the most relevant variables when implementing telework are: Economic growth, quality of life, productivity, use of technology, innovation, investment in ICT infrastructure, and policies for the promotion and empowerment of telework (Castañeda de Ávila, 2017). The study identified two possible scenarios. The first, called the betting scenario, projected the following:

(...) investment resources allocated to increasing connectivity and the implementation of tools that promote teleworking have grown at an annual average rate of over 4% over the last three years, positioning the country within the top 60 worldwide.

The National Government (executive branch) will issue a document through CONPES that will clearly provide official impetus to the allocation of resources for the promotion of telework (...). This will take place in a socio-economic context in which GDP growth will exceed its historical average of 4%. Poverty will be reduced to below 25%, and inequality will reach a historical low with a Gini coefficient below 0.5 (Castañeda de Ávila, 2017).

The second scenario, termed the baseline scenario, predicted that despite any growth in the popularity of telework and the number of teleworkers, the country would still hold 66th place in the relevant ranking. (Castañeda de Ávila, 2017). Furthermore:

Concurrently, the executive and legislative branches will not implement regulations that encourage telework, resulting in a gradual rise in the productivity of teleworkers, with annual increases of less than 2%. This will also lead to a reduction in the hiring of teleworkers, with the proportion of new formal hires being approximately 1 or 2. This will be generated in a socio-economic context that implies a PIN (sic) growth of around 4%, poverty level close to 25% and a Gini coefficient of approximately 0.5 (Castañeda de Ávila, 2017).

According to the National Administrative Department of Statistics (DANE), the Gini coefficient for 2020 was recorded at 0.544. The poverty rate was 42.5% (DANE, 2021b) and the gross domestic product declined by 6.8% (DANE, 2021a). These developments can be attributed to the isolation measures imposed during the pandemic. It is important to note that the pandemic was not included in the projections of most individuals or organisations (El Universo, 2020, Echarri, 2021), therefore the predicted outcomes should be carefully monitored. For instance, the declaration of a health emergency led to the introduction of a transitory paragraph in Article 2 of Law 15 of 1959 which established a digital connectivity allowance for individuals working from home, but not for teleworkers (Article 2, Transitory Paragraph, Law 15 of 1959).

Additionally, two remote working modalities were regulated: home-based work and remote work. However, the regulations governing telework remain unaltered (Tamayo Ramírez & Plata Quesada, 2022).

Despite what seems like a challenging environment for teleworking, the fifth survey on perception and adoption in Colombian companies (2020) highlighted positive trends. The number of companies adopting telework grew from 12,912 in 2018 to 17,253 in 2020, marking a 33.62% increase (MinTIC, 2021a). Additionally, the number of teleworkers rose significantly, from 122,278 in 2018 to 209,173 in 2020, which is a 71.06% increase (MinTIC, 2021a). The adoption rate of telework also saw steady progress, increasing from 32% in 2014 to 55% in 2018, and reaching 56% in 2020. Furthermore, 5% of the companies surveyed had fully implemented teleworking (MinTIC, 2021a). While the growth from 2018 to 2020 was moderate, it still reflects a positive trajectory.

The sector with the highest adoption of teleworking was the administrative and financial departments, which saw an increase from 22% in 2012 to 80% in 2020. In contrast, the commercial and sales departments experienced a decline, dropping from 51% in 2012 to 25% in 2020 (MinTIC, 2021a). This suggests that companies primarily recognized the benefits of teleworking in areas that are essential to the organization but do not require direct customer interaction, as opposed to the commercial sector, which is also critical but necessitates direct engagement with clients.

Regarding the teleworking modalities recognized by law, the most widely implemented was the autonomous modality, which rose from 37% in 2018 to 75% in 2020. Meanwhile, the number of supplementary teleworkers decreased from 29% in 2018 to 17% in 2020, and the number of mobile teleworkers fell from 34% in 2018 to 8% in 2020 (MinTIC, 2021a). This indicates that, in 2020, companies required less frequent presence of teleworkers compared to previous years, although occasional visits to organizational headquarters remained necessary.

Regarding the refusal to adopt teleworking, the percentage has remained around 30% between 2012 and 2020, mainly due to the economic activity of these organizations (MinTIC, 2021a). For those companies that have not yet adopted teleworking, in 2012 it was considered that support should be mostly economic, while in 2020 it was found that support and advice from the government are vital to implement teleworking (MinTIC, 2021a). This indicates that employers, apparently, have become more aware of the organizational culture than the economic factor. This statement can be supported by the figures that the study showed regarding the strategies for implementing teleworking (MinTIC, 2021a):

- Unified monitoring and follow-up systems for teleworkers (73%),
- Competency programs for teleworkers (69%),
- Workshops to support the implementation of teleworking positions (68%).

Even so, 59% of employers who have not implemented teleworking consider that they do not understand its benefits (MinTIC, 2021a).

Subsequently, MinTIC published a study titled Perception and Penetration of Teleworking at the end of 2021, which surveyed administrative staff from public entities regarding the implementation of teleworking within these organizations. The study found that 98% of the respondents were familiar with teleworking, with their primary sources of information being television (29%), the Internet (21%), and other public entities (20%) (MinTIC, 2021b). While the respondents rated teleworking as a good or excellent modality (77%), highlighting its benefits such as resource optimization (46%) and the use of ICTs (33%), they still considered there were challenges in accessing such technologies (40%), particularly among the majority of people (33%) (MinTIC, 2021b). This suggests that government agencies are more concerned with implementation costs than private companies, a point confirmed by 22% of the respondents who have already implemented teleworking in their institutions (MinTIC, 2021b).

Of the surveyed entities, 41% have already implemented teleworking; of these, 15% are in the initial stage of implementation, while another 15% are working on its sustainability through continuous monitoring (MinTIC, 2021b). Unlike the private sector, where autonomous teleworkers predominate, the public sector employs a larger number of supplementary teleworkers, who occupy 80% of the telework positions, followed by autonomous teleworkers, who occupy 18% of the positions (MinTIC, 2021b). This indicates that state institutions, unlike private companies, require their employees to be present at their physical workplaces at least twice a week. Nevertheless, the fact that teleworkers are allowed to work from home (97%) leads to an improved quality of life for teleworkers (76%) and helps save time on commuting or distractions (73%) (MinTIC, 2021b).

Regarding work areas, the highest percentages of total workers are found in the Administrative and Financial areas (60%), Mission-critical processes (55%), and Legal and Planning departments (46% each) (MinTIC, 2021b). Similar to the commercial sector, it is evident that teleworking is easier to implement in critical areas that do not require direct customer interaction. As for the tools used by the entities, the most commonly used devices are computers (60%), primarily for communicating with employees via email (83%) and for real-time collaborative work with cloud storage solutions (such as Microsoft OneDrive, Microsoft Teams, or Google Drive) (MinTIC, 2021b). Meanwhile, the most frequently used technological tools by users are smartphones (69%), primarily for communication with other employees via voice (71%), instant messaging (WhatsApp, 65%), and email (62%), among others (MinTIC, 2021b). Concerning the information systems and work platforms used by each government entity, 48% of organizations use systems that are fully accessible outside of their headquarters, while another 34% utilize systems and platforms with over 75% of their functions and access available remotely (MinTIC, 2021b). All of this suggests that it is increasingly feasible for a significant portion of public employees in administrative, financial, and legal departments to work from home for the majority of their time.

Additionally, in 2019 and 2021, the National Planning Department (DNP) issued the CONPES 3975 and 4023 documents, respectively. These documents provide recommendations and strategies for:

- The implementation of ICTs,
- The creation of content to promote technology adoption,
- The widespread use of the internet,
- The development of digital connectivity infrastructure, and the implementation of other technological tools in companies, including teleworkers (DNP, 2019, 2021).

Based on the aforementioned, this research aimed to analyze the effects of teleworking and its contribution to economic growth in the development of SMEs in Barranquilla

Methodology

The research is quantitative in design and of a descriptive nature. It aims to provide a comprehensive overview of the impact of telework on the economic growth of SMEs in Barranquilla. The study examined the current state of SMEs in Barranquilla one year after the pandemic. It identified the benefits that impact business development and the reasons for the ongoing prevalence of telework in SMEs. This study offers a precise observation of the forms, variables, and dimensions of telework, as well as of the communities, contexts, and environments investigated (Hernández et al., 2020)

The present study utilizes a questionnaire entitled "Effects of Teleworking and Its Contribution to Economic Growth in the Business Development of SMEs." This instrument was initially validated by a thematic expert to ensure that the items measured the intentionality of the research. Subsequently, a pilot test of the questionnaire was conducted, which enabled the correction of items, with the data from companies that have adopted teleworking, excluding those from Barranquilla.

The questionnaire is divided into two sections. The first section contains demographic information, such as the company's name, its economic activity and its age. The second section comprises a series of questions pertaining to the specific objectives of the research. These questions address the conception of teleworking as a modality of work, the distinction between it and working from home, and the utilisation of teleworking within the company. For companies that practise telework, further inquiries are made regarding the departments that utilise it, the number of employees, the modality of telework adopted, and the entity responsible for covering the associated costs. Additionally, the questionnaire explores the impact of telework on the company, the benefits granted by the government, and the measurement of the impact on aspects such as carbon footprint, quality of life, and equity, among others.

In addition, the following questions were posed to the companies surveyed: Was there a change in business policy due to teleworking? Were new market strategies developed to maintain customer loyalty? What strategies were implemented to promote growth under this modality? Were methods for evaluating the performance of employees implemented? The part of the survey that questions companies on their use of telework concludes with inquiries regarding future plans to continue telework, increase the number of employees, and employee satisfaction with this work arrangement. Conversely, companies not offering remote working options were asked to explain the reasons behind their decision not to do so, as well as whether they had explored any alternative implementation processes.

The population under study constitutes the SMEs of the city of Barranquilla that participated in the research process. The sampling of the study was intentional and comprised 77 SMEs of the city, of which 17 were located in Telework and 61 did not continue after the sanitary emergency.

Results

The companies that met the criteria for classification as SMEs in the city of Barranquilla and consented to participate in this research were drawn from a range of economic sectors, with 44.9% of the companies located in the commerce sector. The agriculture and livestock sectors had the lowest rate of participation. It should be noted that the companies with the longest history (3.8%) were those with an age between 11 and 20 years (32.1%), while the companies with the most years of experience were between 11 and 20 years (32.1%). (See more information in Table 1).

Table 1. Sociodemographic Data

Company seniority	Frequency	Percentage
1 to 5 years	10	12,8
6 to 10 years	19	24,4
11 to 20 years	25	32,1
21 to 30 years	16	20,5
31 to 60 years	5	6,4
100 years	3	3,8
Total	78	100,0
Economic activity of the company	Frequency	Percentage
Commerce	35	44,9
Services	21	26,9
Industry	14	17,9
Agriculture and livestock	2	2,6
Construction	6	7,7
Total	78	100,0

Objective 1: Diagnose the current situation of SMEs in Barranquilla one year after the Pandemic of COVID 19.

In order to comprehend the context and situation of SMEs in the aftermath of the pandemic, an inquiry was conducted into the perceptions held by employers and entrepreneurs regarding telework. The findings revealed that 52.6% of the business population holds a favourable view of telework, while 38.5% maintain a neutral stance. With regard to the question of whether respondents are aware of the distinction between telework and traditional work models, the majority of entrepreneurs (62.9%) identified the difference. However, it is noteworthy that 78.2% of SMEs in Barranquilla do not currently utilise telework modalities. (See Table 2).

Table 2. Telework

Imaginary about telework	Frequency	Percentage
Positive	41	52,6
Negative	7	9,0
Neutral	30	38,5
Total	78	100,0
Difference between telecommuting and working at home	Frequency	Percentage
Yes	49	62,8
No	27	34,6
No response	2	2,6
Total	78	100,0
Implementation of telework modality	Frequency	Percentage
Yes	17	21,8
No	61	78,2
Total	78	100,0

Of the 61 entrepreneurs who participated in the survey, only 17 (21.8%) indicated that they had continued to work remotely in the post-pandemic period. The geographical distribution of these remote workers revealed that the majority were located in administrative areas. (52.9%), followed by the commercial sector (23.5%). In relation to the number of employees engaged in teleworking, the data indicates that the majority (58.8%) of employees teleworked alone. With regard to the modality of telework employed, the supplementary modality is the most implemented (82.4%), signifying that employees have the option to work remotely on certain days or during specific hours of the week, whilst still spending a significant amount of time working at the physical location of the company. This modality allows employees to combine face-to-face work with remote work, which can improve work-life balance, as well as increase productivity and job satisfaction. (See Table 3).

It is important to keep in mind that specific definitions and practices of telework may vary depending on the labor laws and internal policies of each company, as well as telework regulations and guidelines vary by employer and also by country.

Table 3. Areas, Employees and Telework

Telework areas	Frequency	Percentage
Commercial	4	23,5
Tenders	1	5,9
Medicine	1	5,9
Administrative	9	52,9
Integral Management	1	5,9
All	1	5,9
Total	17	100

Number of employees in Telework	Frequency	Percentage
1 to 5	10	58,8
5 to 10	4	23,5
10 to 15	2	11,8
More than 15	1	5,9
Total	17	100,0
Telework Modality	Frequency	Percentage
Self-employed	2	11,8
Mobile	1	5,9
Supplementary	14	82,4
Total	17	100,0

With regard to the financial implications of remote working, the majority of employers (85%) report that the company assumes the cost of personnel engaged in remote work. In terms of the training of personnel for remote work implementation, employers assert that their employees have received training in remote work. However, a significant proportion of employers (45%) claim to have not received training, while a further 5% did not respond to the survey. (See table 5).

Table 5. Personnel in Telework

The company assumes the costs of the personnel in Teleworking.	Frequency	Percentage
Yes	6	85,7
No	1	14,3
Total	7	100,0
Training in the implementation of Telework	Frequency	Percentage
Yes	12	70,6
No	4	23,5
No response	1	5,9
Total	17	100,0

Objective 2: To identify the benefits of teleworking that most affect the business development of SMEs in Barranquilla.

Of the 17 SMEs that continued teleworking after the pandemic, 52.9% reported a decrease in absenteeism, which the majority (58.8%) considered to be the most significant benefit. In a similar vein, the majority of entrepreneurs (76.5%) have not received the benefits offered by the state for the continuity of telework. Furthermore, 58.8% of the population report that they did not evaluate the impact of telework on different aspects, such as carbon footprint and quality of life. (more information, see table 6).

Table 6. Impact and Benefits of Teleworking

Benefits of Telework for the Company	Frequency	Percentage
Decreased absenteeism	9	52,9
Increased productivity	3	17,6
Decrease in fixed costs	2	11,8
All of the above	3	17,6
Total	17	100,0
Increased impact of telework benefits	Frequency	Percentage

Decreased absenteeism	10	58,8
Decreased absenteeism	3	17,6
Decreased fixed costs	3	17,6
All of the above	1	5,9
Total	17	100,0
Benefits of the State for implementing teleworking	Frequency	Percentage
Technical support in your company for the implementation of the telework model.	1	5,9
Free initial virtual and face-to-face consulting	3	17,6
None of the above	13	76,5
Total	17	100,0
Impact of telework in different aspects	Frequency	Percentage
Carbon footprint	2	11,8
Quality of life footprint	2	11,8
Equity Footprint	1	5,9
All of the above	2	11,8
None of the above	10	58,8
Total	17	100,0

In relation to the monitoring of teleworking entrepreneurs, the majority (64.7%) report having had to generate new marketing strategies for customer loyalty. Furthermore, slightly more than half of the evaluated population argues that they did not generate methods for measuring productivity (53%), and that one of the factors of business growth in teleworking mode that was mostly used was in... the organisational culture, to achieve that the collaborators adapt to the new challenges, goals, objectives that brings the modality of telework. It is required firstly that the SMEs have a model of how things are done outside and inside the company, defined values, clear and flexible objectives, which can be adapted to the internal and external environment in which the company is located. The identification and commitment of collaborators to the organisational culture is instrumental in fostering the development and sustainability of companies. It is noteworthy that companies that have adopted telework as a novel work modality have been implementing strategies such as flexible scheduling, enabling collaborators to adapt to their The identification and commitment to the organisational culture by the collaborators is pivotal for the development and sustainability of the companies. Companies that have adopted telework as a new work modality have been implementing strategies such as flexible scheduling, which facilitates the alignment of work and personal life (resulting in a reduction in absenteeism and enhanced productivity). Other strategies include time management (promoting disconnection from work) and processes of assistance in managing new platforms or technological tools (e.g. virtual meetings). These factors exert a direct or indirect influence on the quality of life, equity, and carbon footprint.

Table 7. Follow-Up Strategies to Telework

New marketing strategies for customer loyalty	Frequency	Percentage
Yes	11	64,7
No	6	35,3
Total	17	100,0
Productivity measurement methods	Frequency	Percentage
Yes	8	47,1
No	9	53

Total	17	100
Strategies for business growth in teleworking modality.	Frequency	Percentage
Workshops to support the implementation of technological tools.	3	17,6
Construction of new technological tools for digital transformation.	5	29,4
To have a monitoring and follow-up system for teleworkers	1	5,9
Organizational culture: Teaching time management, resources and schedule flexibility.	8	47,1
Total	17	100,0

The employers expressed satisfaction with the telework arrangement, with 100% of respondents reporting satisfaction. Furthermore, the majority of employers indicated their intention to continue utilising telework, with 88.2% confirming their intent to do so. However, it is noteworthy that the majority of employers (58.8%) did not modify their business policies in response to the transition to telework. Additionally, a significant proportion of employers (17.6%) did not provide a response regarding the modification of their business policies. For more information see table 8.

Table 8. Satisfaction and Continuity of Teleworking

Satisfaction with teleworking	Frequency	Percentage
Yes	17	100
Continuity of teleworking and increase of employees in the modality.		
Yes	15	88,2
No	2	11,8
Total	17	100
Modification of company policy	Frequency	Percentage
Yes	4	23,5
No	10	58,8
No answer	3	17,6
Total	17	100,0

Objective 3: To document the situations that prevent the adoption of telework in SMEs in Barranquilla.

The SMEs in Barranquilla that did not adopt teleworking were found to be primarily driven by the fact that the tasks could not be performed from home (58.3%). Among the surveyed entrepreneurs, 44.9% of companies were found to be engaged in the commercial sector, while 26.9% were involved in the service sector. This allowed for the conclusion of several aspects, including: SMEs in Barranquilla are companies that are within the secondary and tertiary sector of the economy; therefore, the activities required for their operation have to be developed with personnel who attend in person to the physical facilities, since they do not have automated tools or equipment and the tasks that are performed are manual or performed under production, logistics, commercial or sales processes. It is evident that SMEs in Barranquilla are companies operating within the secondary and tertiary sectors of the economy. The nature of their operations necessitates the presence of personnel within physical facilities, as the absence of automated tools and

equipment renders the adoption of technology impractical. The tasks performed by these personnel are predominantly manual or integral to the processes of production, logistics, commercial activities, and sales. This traditional approach to business operations, devoid of technological advancement that would systematise processes, is characterised by a paucity of investment in technology. The financial constraints experienced by many companies, which preclude their capacity to advance in the realm of business digitalisation and assume the costs associated with remote working (including equipment and connection expenses), are a contributing factor to this limited investment in technology. However, in the forthcoming years, companies may find a means to recoup these investments through the reduction of fixed costs, a benefit that is a consequence of remote working practices.

The lack of technology or systematisation of processes makes it difficult to supervise employees working remotely and even more difficult to follow up on assigned tasks if there is no business or organisational culture in which each of the parties, both partners and employees, assumes the commitment and responsibility that this new way of working entails. It should be noted that the entrepreneurs of SMEs in Barranquilla have a management and leadership style in which they want to see their collaborators in their work, believing that this generates greater productivity. From this point of view, having starting and finishing times encourages a higher degree of commitment to achieving the company's economic objectives.

Table 9. Non-adoption of Telework

Reasons for not adopting teleworking	Frequency	Percentage
Lack of employee commitment	4	16,7
Technological development of the companies.	2	8,3
Lack of staff supervision control.	4	16,7
Tasks that cannot be performed from home	14	58,3
Telework implementation alternatives	Frequency	Percentage
Change management	3	12,5
Knowledge management	1	4,2
Productivity indicators system	1	4,2
All of the above	1	4,2
None of the above	18	75,0
Total		100,0

Discussion

In the last decade, teleworking has experienced significant growth around the world, transforming the way companies operate and employees perform their tasks (Jones, 2019). Colombia has been no stranger to this global trend, with Colombian small and medium-sized enterprises (SMEs) being particularly affected by this change in labour dynamics (Gutiérrez, 2021). However, the implementation and perception of teleworking in SMEs in Barranquilla, Colombia, have been the subject of study in this research. The present study undertakes a comprehensive analysis of attitudes towards telework, the areas of implementation, perceived benefits, barriers and adoption strategies in SMEs in Barranquilla.

The results demonstrate that, despite the predominantly favourable perception of telework among companies, significant challenges emerge during its implementation (Acosta Marín, 2018). The primary barriers identified include a lack of supervision and the inability to perform certain tasks remotely. To enhance productivity and satisfaction in telework, the implementation of organisational culture strategies is

imperative (Ramírez and Hernández, 2019). Furthermore, the predominance of companies not implementing alternative measures to facilitate telework underscores the necessity for enhanced government support to facilitate the transition to this modality.

Despite the positive perception of telework among SMEs in Barranquilla, significant challenges remain in terms of supervision and task type. To overcome these barriers and maximise the benefits of teleworking, it is essential that companies implement appropriate organisational culture strategies and receive government support. Furthermore, it is crucial to raise awareness of telework implementation alternatives to adapt business policies to the new ways of working (Ramírez and Rúa, 2014; Valero Pacheco and Riaño Casallas, 2020).

This paper demonstrates that telework in Colombia faces both challenges and opportunities in the current digital context. A significant challenge that this work addresses is the need to understand the impact of telework on Colombian SMEs. To this end, it is essential to contextualize the adoption of this modality in the country (Valero Pacheco and Riaño Casallas, 2020). Government policies, technological infrastructure and cultural attitudes towards remote work should also be explored, taking into account that entrepreneurs claim to know the difference between telework and work from home, but when contrasting the decree 1227 of 2022 that governs telework in Colombia, irregularities in its implementation are visible.

Despite the benefits that telework can offer, Colombian SMEs face a number of challenges in implementing this modality, including the digital divide, lack of financial and technological resources, and barriers to communication and collaboration between geographically dispersed teams (MinTIC, 2021a). Despite the above, teleworking also offers significant opportunities for the business development of Colombian SMEs, including expanding talent, reducing operating costs, increasing productivity and improving the work-life balance of employees (MinTIC, 2021a)

Teleworking has proven to be an effective tool for increasing productivity in Colombian SMEs by allowing employees to work from home, commuting is eliminated and interruptions are reduced, leading to greater concentration and work efficiency. In addition, telework offers flexibility in working hours, allowing employees to adapt their working day to their personal needs, which can increase job satisfaction and commitment, essential elements for improving productivity (Reyes Pérez & Delgado Rodríguez, 2022).

Teleworking has encouraged innovation in Colombian SMEs. By removing geographical barriers, companies can access a variety of specialised talent in different regions of the country. This means that SMEs can form multidisciplinary teams that bring different perspectives and creative approaches to business problems, which can drive innovation and the generation of new ideas. In addition, teleworking promotes the adoption of information and communication technologies (ICT), which can improve operational efficiency and enable SMEs to implement more innovative processes.

However, teleworking also poses challenges for Colombian SMEs. The lack of face-to-face contact can hinder effective communication between employees and limit team cohesion. It can also be difficult for some SMEs to manage:

It is therefore vital that they establish clear policies and monitoring processes to assess the productivity of employees working remotely. A lack of face-to-face interaction can affect collaboration and creativity, which in turn can hinder innovation in the business environment.

Telework has brought with it the need for employers and employees to acquire new skills and competences, for which training programmes must be implemented internally or in collaboration with educational institutions and government organisations (Morelos Gómez and Lora Guzmán, 2021). In this sense, this modality has raised legal and regulatory challenges in terms of the protection of labour rights, occupational health and safety and confidentiality of information. Therefore, research should be carried out to discuss how Colombian laws and regulations respond to these issues and what measures SMEs can take to comply with current regulations.

To address these challenges, Colombian SMEs can implement concrete strategies. It is critical to establish clear policies and monitoring processes to evaluate the performance of employees working remotely. In addition, companies can invest in collaborative technologies that facilitate online communication and collaboration, which can improve team cohesion and foster innovation. It is also important to foster a company culture that values flexibility and builds trust between employees and employers.

The impact of telework on productivity and innovation in Colombian SMEs has been significant. Proper management of telework can yield substantial benefits for companies, including increased productivity and enhanced innovation. However, it is imperative to address challenges related to communication and collaboration to ensure that telework is an effective tool for the growth and development of SMEs in the country.

In Barranquilla, an SME that is currently 100% teleworking is one that was conceived in this modality from the beginning, since its economic purpose or economic activity obliges it to adopt and implement this form of hiring, and here you can see the advantages of teleworking in companies. The savings in fixed costs (office rent, utilities, maintenance of the physical infrastructure, etc.) have a positive impact on the company's PYG. Another advantage is the ability to count on highly qualified personnel located in cities other than Barranquilla, which has a positive impact on productivity and allows this to be used as an advantage over the competition, whether national or international. It must be taken into account that since the advent of globalisation, the competition of companies is worldwide, and the pandemic of COVID-19 has strengthened this trend, making it necessary to have qualified personnel who can adapt quickly to the economic, political and social environment. All these advantages, mentioned in this research and observed in practice in some SMEs in Barranquilla, allow us to conclude that the economic contribution of teleworking is reflected in the profitability of the company, not only for its partners, but also for its employees and its environment (suppliers, competitors, customers, government, etc.).

However, it should be noted that the vast majority of SMEs in Barranquilla continue to implement face-to-face work for the reasons already discussed in previous paragraphs. This suggests the need for a generational and cultural change process, initiated first in areas of direction and management, to increase the uptake of teleworking in small businesses, such as those examined in this study. It is crucial to recognise that the economic vitality of Barranquilla is heavily reliant on the performance of its SME sector. Consequently, a concerted effort is required from the government, employers, employees, customers and suppliers to ensure the long-term implementation and sustainability of teleworking, thereby generating the necessary economic contributions for the city's continued growth and development.

References

- Acosta Marín, A. (2018). Telework and perception of productivity: An analysis of labor productivity from the point of view of the various actors of telework in a public sector entity in Antioquia-Colombia.
- Castañeda de Avila, C. R. (2017). Prospective analysis of telework in Colombia to 2020.
- Decree 555 of 2022. By which Section 6 is added to Chapter 6 of Title 1, Part 2, Book 2 of Decree 1072 of 2015, Sole Regulatory of the Labor Sector, and Article 17 of Law 2069 of 2020, and Law 2121 of 2021 is regulated and remote work is regulated. April 9. Presidency of the Republic of Colombia.
- Decree 636 of 2020. By which instructions are issued due to the sanitary emergency generated by the COVID-19 Coronavirus pandemic, and the maintenance of public order. May 6, 2020. Presidency of the Republic of Colombia.
- Decree 649 of 2022, Whereby Section 7 is added to Chapter 6 of Title 1 of Title 1 of Part 2 of Book 2 of Decree 1072 of 2015, Sole Regulatory Decree of the Labor Sector, related to the enabling of work at home. April 27 Presidency of the Republic of Colombia
- Decree 771 of 2020. Whereby a measure is provided to guarantee access to connectivity services within the framework of the State of Economic, Social and Ecological Emergency throughout the national territory. June 3, 2020. Presidency of the Republic of Colombia.
- National Administrative Department of Statistics (2020a). Press Release. In 2020 Colombia's Gross Domestic Product decreased 6.8%. Retrieved January 23, 2023. Available at https://www.dane.gov.co/files/investigaciones/boletines/pib/cp_PIB_IVtrim20.pdf
- National Administrative Department of Statistics (2020b). Press Release. In 2020 monetary poverty was 42.5% and extreme monetary poverty was 15.1% in the national total. Accessed January 23, 2023. Available at https://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/2020/Comunicado-pobreza-monetaria_2020.pdf

- National Planning Department (2019). CONPES Document 3975. Accessed January 23, 2023. <https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/3975.pdf>
- National Planning Department (2021). CONPES Document 4023. Retrieved January 23, 2023. <https://colaboracion.dnp.gov.co/CDT/Conpes/Econ%C3%B3micos/4023.pdf>.
- Hernandez Sampieri and Mendoza (2020). Research methodology: the quantitative, qualitative and mixed routes. McGraw-hill.
- Law 15 of 1959. Whereby the State is mandated to intervene in the transportation industry, the employer's transportation subsidy is decreed, the urban transportation fund is created and other provisions are enacted. April 30, 1959.
- Law 2121 of 2021. Whereby the remote work regime is created and rules are established to promote and regulate it, and other provisions are enacted. August 3, 2021. D. O. No. 51755.
- Law 2088 of 2021. Whereby work at home is regulated and other provisions are issued. May 12, 2021. D. O. No. 51672.
- Ministry of Information Technologies and Communications (2021a). Quinto Estudio de Penetración en Empresas Colombianas (Fifth Study of Penetration in Colombian Companies). Retrieved January 23, 2023. Available at https://teletrabajo.gov.co/622/articles-179224_recurso_1.pdf
- Ministry of Information Technologies and Communications (2021b). Penetration and perception of telework. Retrieved January 23, 2023. Available at https://teletrabajo.gov.co/814/articles-238323_recurso_1.pdf
- Morelos Gómez, J., & Lora Guzmán, H. S. (2021). Analysis of telework in tourist travel agencies in the city of Cartagena-Colombia. *Saber, Ciencia y Libertad*, 16(1), 116-127.