How to TeleGrow Training Modules: The Ultimate Teleworking Training for VET providers

Index

1. Introduction to the topic

In 2020, the COVID-19 pandemic resulted in major worldwide economic and employment changes. The World Health Organization (WHO) incited the governments to get revved up to deal with this newly emerged situation; namely by implementing various drastic measures such as nationwide lockdowns and stay-at-home policies. Therefore, many workers and employees were forced to work from home, if possible. Although teleworking, also known as telecommuting, was a common practice among some individuals and organizations over the last years before the pandemic outbreak, most of the workforce wasn't familiar with it regarding either its part-time or full-time aspect. Eventually, teleworking becomes an important factor in business continuity. In this context, even though digital skills are a prerequisite for teleworking, some employees, especially those aged 50+, comprise a vulnerable group that is threatened not only by the virus itself but also by the shift that employment conditions have taken.

Therefore, following the TeleGrow project objectives, this module is created to serve as an introductory to the digital transformation of employment elaborating on several principal topics regarding teleworking. More specifically, the module consists of references to the new opportunities that arise for learners aged 50+ and their trainers by the implementation of teleworking and how using digital technologies acts as green practice and positively affects environmental sustainability. Moreover, this module introduces the TeleGrow project target groups to the aspect of information and data literacy along with the description of a typical teleworking environment. Finally, the module concludes by providing a worksheet to learners to self-evaluate the knowledge acquired by reading these learning materials.

2. Learning objectives
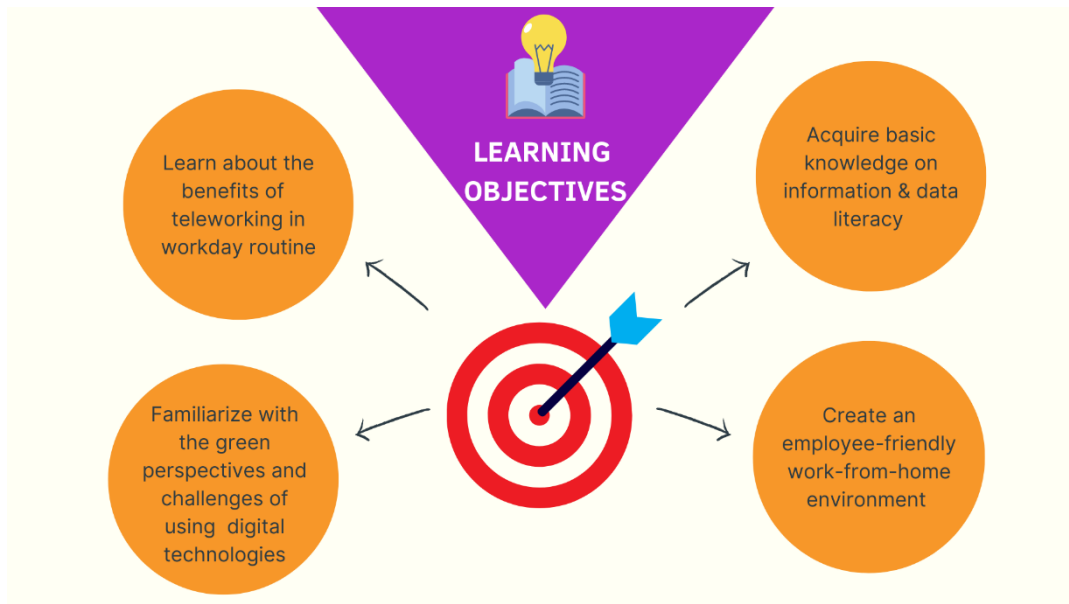
Source: own elaboration

Upon the completion of this module reading, any learner will manage:

- to be informed about the benefits of implementing teleworking in their workday routine

- to obtain useful insight on green perspectives and challenges that come with the use of digital technologies

- to acquire a basic knowledge of what information and data literacy are and which are the main relevant concepts and notions

- to know about elements that help in creating a work-from-home environment that could improve an employee's productivity and work efficacy

- to try creating an employee-friendly work-from-home environment by addressing the relevant practical activity at the end of the module

3. Learning Content

Chapter 1 – Teleworking: Open-up of new opportunities for learners and trainers

Source: own elaboration

With the ongoing status of the COVID-19 pandemic, flexibility in workplaces becomes a serious talking point and, especially, the concept of teleworking dominates workplace conversations as an up-and-coming practice, despite started fitting into work environments before the pandemic. With employers and employees opting for it as an alternative option even after the restoration of the workday routine to its pre-COVID-19 status, the new discussion is about finding the right balance between in-person and online work environments, so everyone can continue to work with the best possible efficacy. Moreover, teleworking provides several opportunities for those who implement it to grow personally and professionally.

Exploring the different opportunities that can be emerged, it is accurate to say that teleworking:

➤ **positively affects employees' life**

Teleworking could assist individuals to maintain a balance between work life and personal life by adding the necessary flexibility to the work schedule and, thus, turning employers and employees into more productive and happier ones.

➤ **ensures timesaving & improves time management**

Teleworking provides the opportunity for a considerable reduction in the amount of time spent daily on travelling to and from the workplace since commuting was normally conducted by either a private vehicle (i.e., car, motorbike, etc.) or a mass transit means (i.e., bus, light-rail, etc.). Moreover, the reduction in commuting time provides the spare time that could be distributed to facilitate the implementation of work tasks or to have some personal time.

➤ **simplifies the starting process of work**

In the teleworking context, where the physical presence requirement is relinquished, the only thing that a teleworker must do is to follow a simple process: switch on a computer/laptop placed anywhere in the home, connect to the Internet, and that's it; everything is set for working remotely.

➤ **reduces the consumption of time & money**

Spending time and money is also no longer an issue as teleworking provides opportunities to handle schedules more efficiently. Some notable examples are:

- making work division into blocks of time, so employees could stay more easily focused on their completion
- ensuring time availability for out-of-work activities such as spending more quality time with family and friends or for entertainment, travelling, and hobbies
- limiting either commuting costs or/and daily operational costs (i.e., rent), thus saving money at least to some extent.

provides opportunities for better concentration on work

Teleworking could improve an employee's ability to concentrate during work time because when the workplace-at-home is well-planned, it is a quieter and more adjusted to personal needs environment, unlike the typical working one.

helps employees avoid workplace-related distractions

Teleworking assists employees to be more focused on their work, without hearing unnecessary hearing or visual incidents that divert their attention away while performing a task. Thus, the work is done more efficiently and in less time.

Source: istockphoto.com

allows actual remote work

Teleworking allows any employee to work remotely not only from home but from actually anywhere on the planet, as its only requirement is having access to an active internet connection.

helps avoid conflict in workplaces

Teleworking entails working together with employers and colleagues while one is away from another. This situation could help avoid conflicts, as when someone is at

home has a more relaxed disposition, thus being less prone to conflicts that may occur. On the contrary, being in a working environment and spending hours interacting with others that have different personalities and/or approaches to the job may lead to a routine that is characterized by higher tensions.

promotes self-regulated work

Teleworking allows employees to work from a place of their own choice, at their own pace, thus, completing tasks in a way that suits them the most.

provides opportunities for environmental protection

Teleworking can prevent environmental pollution to some extent, i.e., by limiting commuting, reducing greenhouse gas emissions, saving paper, etc. Therefore, it becomes an advantage not only for organizations and employees but also for society.

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Chapter 2 – Green perspectives of using Digital Technologies

One of the challenges of the modern world is the combination of the digital and green transition. Although these transitions may seem unrelated to each other, there will be no success in one without success in the other, as they are of equal importance. The use of digital technology entails energy use, taking into consideration the power and energy resources needs of the technology industries, the environmental pollution factor, and the electronic waste as an outcome of the purchase and use of new technology items. However, using digital technologies has also green, environment-friendly perspectives on many aspects.
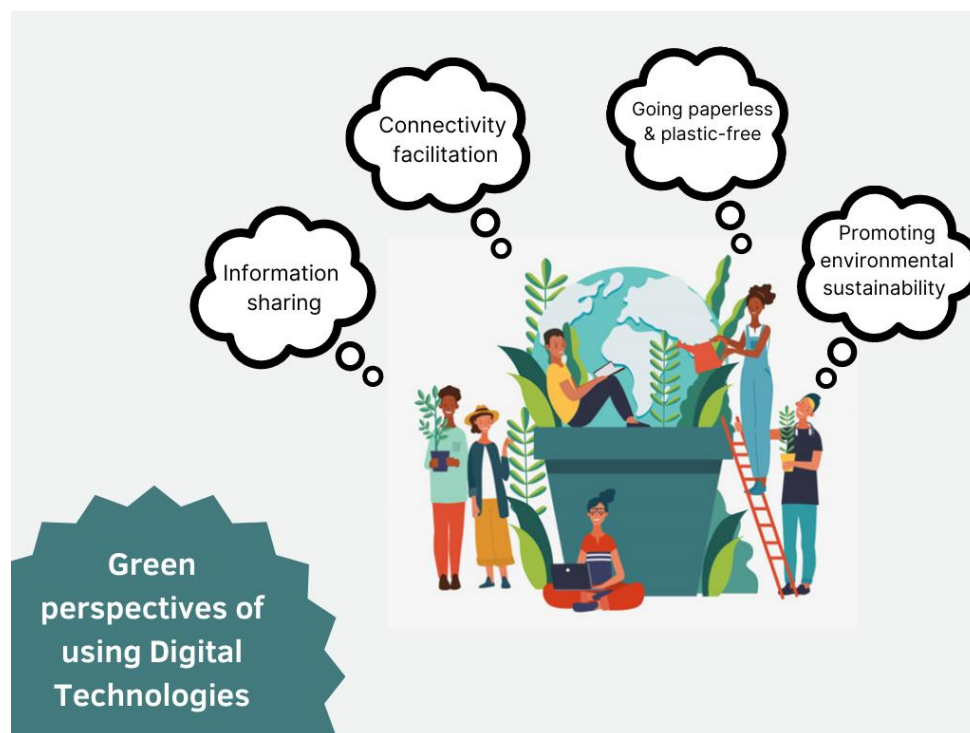
Source: istockphoto.com & own elaboration

> Information sharing <

Using digital technology (e.g., internet, email, and social media) for information sharing can be helpful in numerous ways. For example, consumers can research the manufacturing process of their desired products, scientists can collect their data remotely, and learners can be remotely educated by teachers who live far away from

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them being in the same city, country, or even abroad. Moreover, digital technology is an awareness-raising tool regarding information about environmental issues, problem-solving procedures, and learning about developing more efficient and sustainable technology.

> Connectivity facilitation <

Another green benefit of using digital technologies is the facilitation of connectivity between individuals. Organizing online meetings and events reduces commute time and expenses, as the need for transportation by planes, car, or mass transit means is not necessary anymore and, consequently, energy use is getting lower.

Source: istockphoto.com

> Going paperless & plastic-free <

In addition, using digital technologies means that documents' delivery and storage can be done electronically. This paperless practice limits the need for mail delivery, paper manufacturing, and storage because when in the office, the need for printouts increases. Therefore, in this case, there can only be soft copies. In addition, during commuting to work is common to buy food, coffee, or something to drink in a plastic

package, while using digital technologies to work from home makes it easier to use supplies made from reusable or recyclable materials, thus contributing to the plastic use reduction.

> Promoting environmental sustainability <

The use of digital technology tools allows both individuals and businesses to foster environmental sustainability. Some of these tools are:

→ environmental sensors or Internet of Things (IoT)

The use of environmental sensors or the Internet of Things (IoT) provides an opportunity for observing environmental health issues, for example, forest fire watch, thus improving response efforts and identifying their environmental impact.

→ artificial intelligence (AI)

AI is also a helpful tool as provides a better understanding of potential environmental damage by the way it functions.

→ smart grids

The implementation of smart grids; namely, the combination of smart devices with renewable energy sources, can lead to real-time data collection, thus improving data efficiency, saving energy, and, consequently, reducing the dependence on fossil fuels.

→ big data or analytics

They can be utilized by businesses to perform environmental health assessments and optimize resource allocation, for example in the agriculture sector.

→ blockchain

The adoption of blockchain by organizations is used to monitor their supply chains and to allow their customers to have access to useful data, thus improving environmental sustainability, leading to paper consumption reduction, and consequently limiting deforestation. Additionally, they have lower carbon footprints.
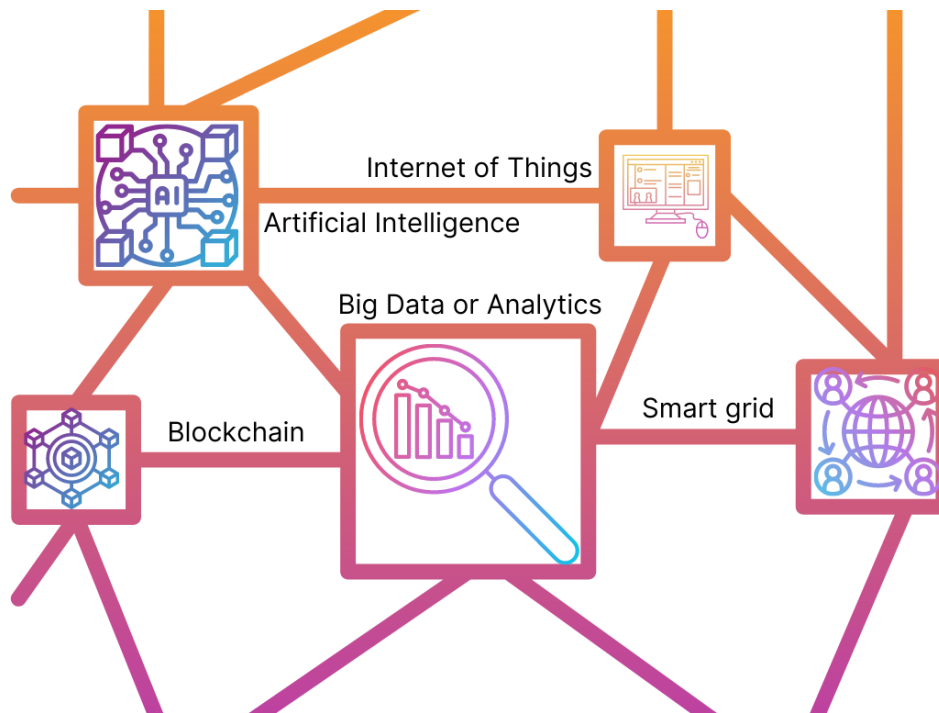
Source: own elaboration

Using digital technologies daily have also some negative environmental effects. In terms of data collection, processing, and storage, they normally require large data centre facilities; namely, buildings geared with IT equipment, have major energy needs not only for maintaining the function of this equipment but also for cooling the facilities, as they create so much heat that large air conditioning units or many cooling liquids are necessary. Energy use reduction in these buildings can be achieved by providing power that comes from renewable sources, upgrading hardware to more energy-efficient ones, and even changing the location of a data centre to one with a cooler climate, thus allowing outside air to join the cooling process.

# Chapter 3 – Introduction to Information and data literacy

The use of information and data is currently an important established innovation factor. It affects decision-making processes and business strategies that individuals implement in their work, so intuition is sidelined in favor of information and statistics, which are utilized vastly, leading to performance improvement and overall efficiency. However, access to information and data does not ensure success in the work field. It requires a certain level of knowledge and understanding regarding turning these elements into an advantage. Therefore, there is an increasing demand for employees with information and data literacy in the labour market.

According to the definition of information and data literacy, in this context, this kind of literate individual can read, comprehend, and interpret information and data variously without the requirement of being a professional or having expertise in this field. The main notions for which any interested individual should be able to have a level of understanding are the various data types, common data sources, analysis types, and data hygiene, along with any relevant tool, technique, and framework.

Information and data literacy assists an individual with a respective comprehension to apply its knowledge to any decision-making process, thus rendering it an increasingly important factor for a variety of working positions, from upper management staff to employees, adding further value to their work environment and practices.

> Basic skills & concepts <

Regarding the basic information and data literacy skills and concepts that can be implemented and utilized in any business, they can be summarized as follows: data analysis, transformation, visualization, ecosystem, management, and, finally, the data team assembly.
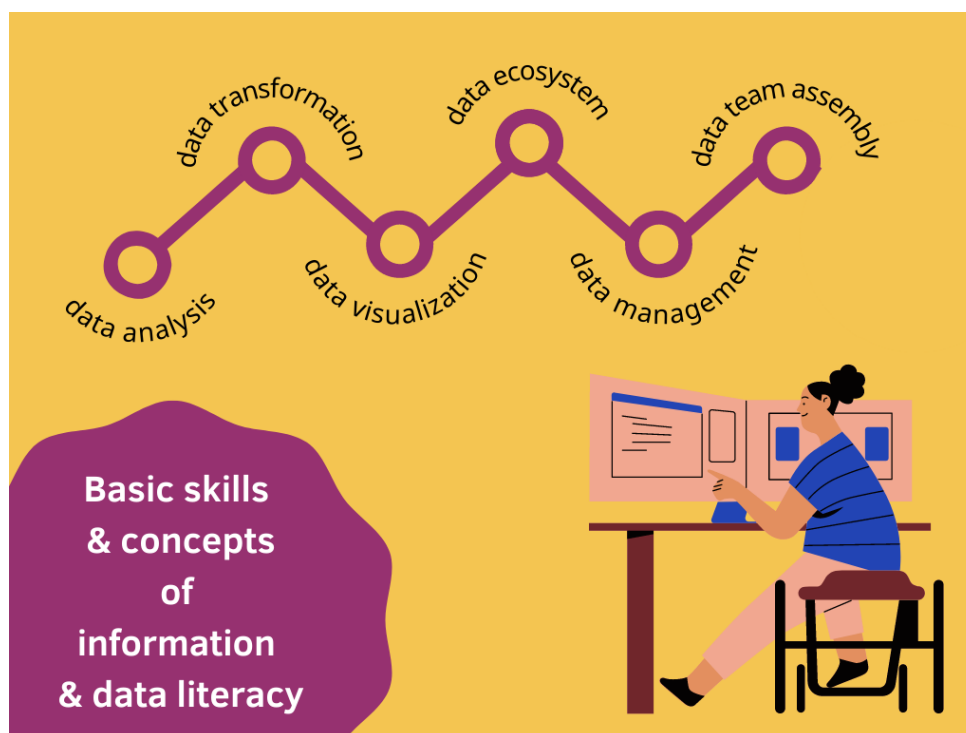
Source: own elaboration

➡️ <u>data analysis</u>

It refers to reading and analyzing data to gain useful insights. Statistical models and algorithms are among the many versatile tools and frameworks that can be used to conduct analysis. Specifically, a statistical model is a mathematical one that is used to provide statistical assumptions during the data generation process, which are usually in quite an idealized form. An algorithm is a finite sequence including exact instructions. By following them specific problems can be resolved or computations can be performed, in the contexts of mathematics and computing. Data analysis can also be accomplished by simply evaluating data and generating conclusions.

Various types of data analysis can be conducted, but the following four are the most typical:

a) *descriptive analysis* that aims to the explanation or description of what has occurred,

b) *diagnostic analysis* that aims to the explanation or diagnosis why something occurred,

c) *predictive analysis* that attempts to predict what could occur, and

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d) *prescriptive analysis* that aims to propose an action plan that will end up with the desired result.

➤ data transformation

Data transformation, also named data wrangling or munging, or cleansing, refers to the procedure of converting data from its original state into a more legible form for improved user comprehension. Data transformation can be shaped into forms in numerous ways, with the most frequent ones being correcting data errors and filling data gaps. It is important for limiting the possibility of analysis errors that usually accompanies this procedure. In the business sector, various algorithms and technologies are used for automatic data clearance, but each employee is individually responsible for producing, collecting, or uploading data, and ensuring that it is conducted following his/her organization's objectives.

➤ data visualization

It refers to the procedure that includes the development of graphical or visual data representations and it is usually a major aspect of communicating findings effectively. Data visualizations play a critical role in making data available to individuals in and out of a specific work environment, especially to those who lack adequate data literacy. Providing an investor with a chart or a graph containing an organization's financial report is a practical example of data visualization. Along with charts and graphs creation, tables, maps, infographics, and even videos or GIFs, are also considered common examples of data visualization techniques. Various tools and software, ranging from free solutions in the likes of Microsoft Excel and Google Charts to premium commercial software like Tableau and Microsoft BI, may be used to create these visualizations.

➤ data ecosystem

This term can be used to describe the sum of the components used by an organization to facilitate its data collection, storage, and analysis procedures. A data ecosystem encompasses both physical and non-physical data aspects, including data sources,

programming languages, code packages, algorithms, and relevant software. Its distinctness is rather logical, however, there are cases of data ecosystems overlapping when having similar data sources or using the same third-party tools. The comprehension of an organization's data ecosystem is very helpful for an employee to improve his/her understanding of data and information complexity, due to the presence of many components in these ecosystems that must work together, and, perhaps, to encounter opportunities for maximizing work efficacy.

 data management

This term describes the policies and practices that an organization uses to manage its data assets. This notion is equivalent to having a guidebook that was created by an organization precisely for ensuring that its data is valid, internally accessible, and thorough. Many organizations provide their new employees with guidelines regarding their specific policies regarding data management.

There are four main aspects of data management:

a) *quality*, referring to the way an organization expects to keep its data up to date along with a high level of accuracy and reliability,

b) *security*, referring to the way an organization preserves its data by preventing unauthorized access to it,

c) *privacy*, referring to the way an organization prevents information and data of sensitive nature, in the likes as employees' or customers' financial information and records, from unauthorized collection and storage, and

d) *monitoring*, referring to the way an organization ensures the necessary consistency for successfully implemented data procedures.

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Source: istockphoto.com

data team assembly

Assembling a group of employees that handles data; namely, a data team, is crucial to data management, so the selection process of its members and the distribution of the internal roles are important success elements, regardless of the employer's involvement in their work. The structure of a data team varies according to each organization's size and the degree data is leveraged during any workday. Therefore, data teams usually consist of individuals filling the following work positions:

a) *data scientist*, an employee that uses mathematics, programming, and tools at an advanced level to perform and manage extensive analyses,

b) *data engineer*, an employee that oversees developing databases and continuously supports them during any data project,

c) *data analyst*, an employee that performs any analysis that is required.

Finally, the growing importance of information and data in any sector, either a productive or a services' one, raised the demand for skillful data professionals, who have an acceptable level of data literacy with a growing perspective, thus adding future value to the sector. In addition, there is a need for assessment of the existing data literacy among the workforce of an organization. This assessment could include

checking the number of employees that could perform tasks in the likes of correlations or statistical judgments or developing a business case based on data or providing appropriate explanations regarding the results of processes or machine learning algorithms or even checking the customer appreciation of the shared data.

Therefore, information and data literacy improvement should be a prerequisite for any employee. That can be achieved in various ways, from volunteering for an organization's data projects to joining training science or analytics courses regarding current data versatility comprehension and data skills acquisition. The design of an efficient training course should begin with the identification of the existing level of information and data literacy, should continue with the gaps and communication barriers, and then with the creation of an open and creative learning environment. This process should be completed by implementing exemplary and experiential lessons and workshops that eventually lead to enhancing information and data literacy.

Source: istockphoto.com

Chapter 4 – Creating an efficient work-from-home environment

Organizations across the world are trying hard to minimize the impact of COVID-19, using different practices. Among them is the establishment of a work-from-home policy, so their employees can do their jobs remotely and, therefore, safely for them. Teleworking reduces commute time and renders work schedules more flexible. Thus, the employees are forced to change their work routines to remain productive and efficient. Therefore, a new need emerges from this situation, the creation of an employee-friendly work-from-home environment.
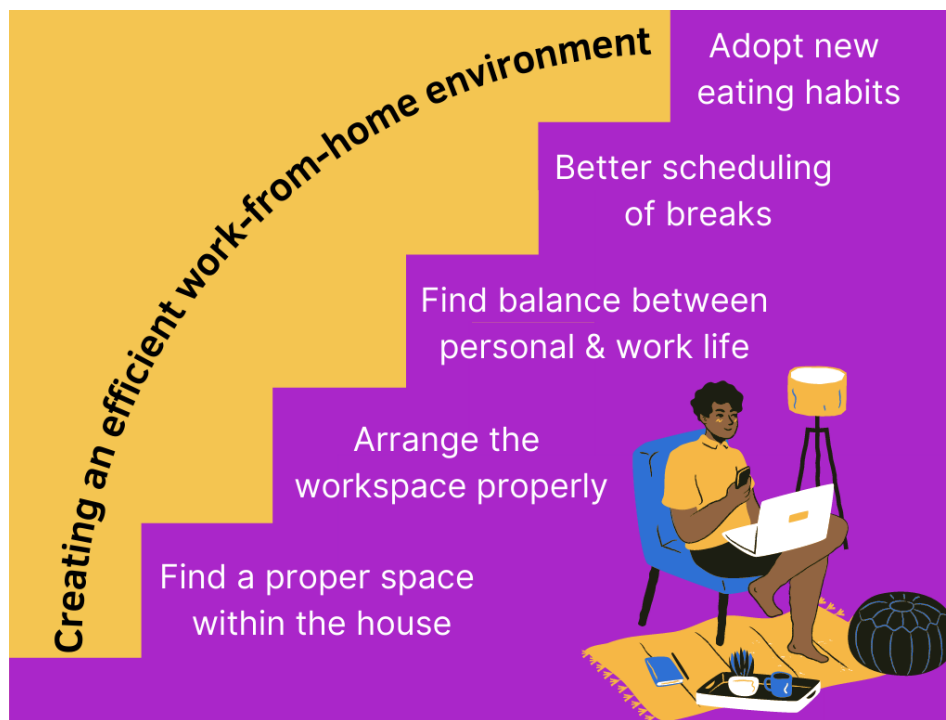
Source: istockphoto.com

There are some steps-actions that a teleworker can perform to establish a work-appropriate place at home.

Finding a proper space within the house

Ideally, the new workplace at home should be a room, where the teleworker could isolate himself/herself both visually and acoustically, thus being distraction-free. In

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addition, a place dedicated to work within the house sets the boundary between work and personal life without literally leaving work or home. This new workplace should also be characterized by adequate environmental conditions for the teleworker; namely, temperature, humidity, ventilation, and lighting. It should also be well-equipped and provide good connectivity (internet, telephone line, etc.). Thus, the teleworker will be able to work with the same efficacy as working at the office.

Arranging the workspace properly

Regarding comfort in a work-from-home environment, its suitability should be evaluated according to the teleworker's needs. Having a sedentary job that requires being present in front of a computer screen can be related to several health issues (i.e., eye fatigue, musculoskeletal issues, mental and cognitive overload, etc.). Therefore, the teleworker needs to be precautious by adopting some preventive measures by taking into consideration not only his/her personal needs, but the time also needed to spend in front of the screen, and the workplace space arrangement.

So, at first, the teleworker should ensure work furniture is comfortable as well as ergonomic, and adjustable to maintain a good body posture and limits musculoskeletal risks throughout daily work hours. That applies also to the information technology (IT) equipment (i.e., screen, mouse, keyboard, etc.), a prerequisite to characterize a working position as comfortable. In addition, good equipment space arrangement is also important as it provides sufficient space for the teleworker to move or to change his/her position at will. Teleworkers' overall comfort can also be improved by taking short breaks from computer work periodically to move away from the workplace, do relaxing exercises, rest his/her eyes, etc.

Balancing personal life & work life

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Regarding the workday routine, that will change in the context of working-from-home, it is important to set boundaries between personal and work life. A basic piece of advice to a teleworker is to monitor the time spent on working, for example, by using a calendar. Moreover, in the case of living with others, the teleworker should have an honest discussion with each one about setting some ground rules to make this situation work, whether the others telework too or not, to avoid unnecessary distractions or interruptions.

Source: istockphoto.com

Scheduling of breaks

An important factor of telework day is to take breaks from work, as also mentioned before. Sitting in front of a computer for hours may lead to tiredness. Therefore, sometimes the teleworker needs to move away from the workplace, take a short walk inside the house or outside, or have some other kind of short physical exercise. The teleworker should also combine some work-related activities that do not require computer use, i.e., having a telephone conversation or a video chat, with a short walk.

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Adopting new eating habits

Finally, the teleworker should find the time between work tasks for short food breaks to have nutritious meals that eventually help with work performance improvement. So, a good breakfast and lunch routine is essential during teleworking. Easy-to-prepare healthy meals, delivered at home, or prepared in advance for time saving and avoiding distractions reasons, can be a worthwhile addition to the daily telework routine and keeps teleworkers productive and focused.

Source: istockphoto.com

![TeleGrow — Enhancing the Teleworking Digital Skills for the Middle aged employees](logo)

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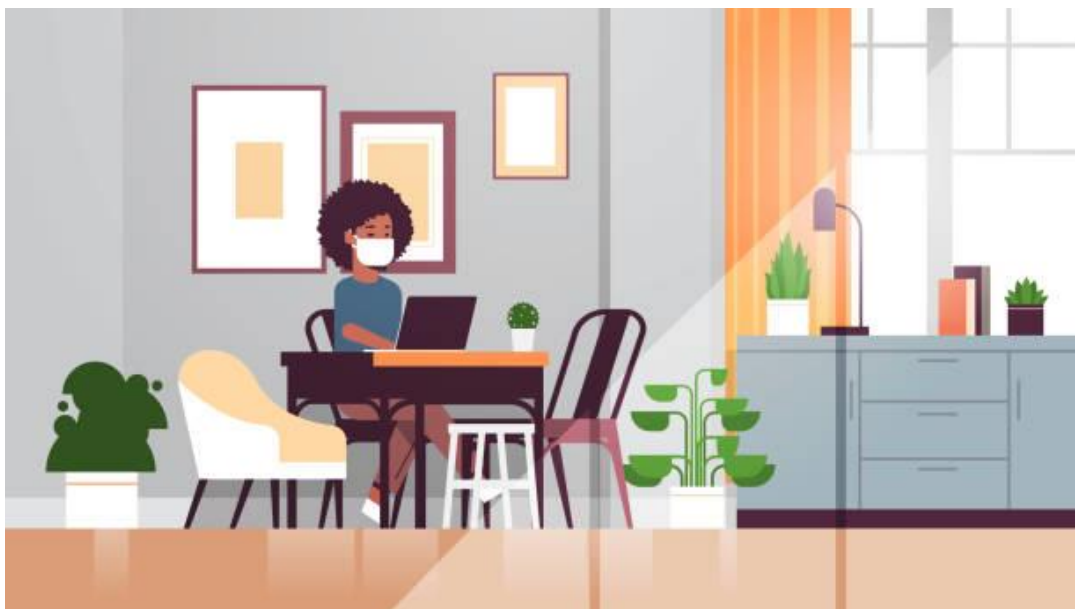
Chapter 5 – Practical Activity/Worksheet & Useful Tools

<u>Practical Activities</u>

1. Home workspace arrangement

- Try to organize a space/room at your home in a way that suits you the most for teleworking purposes.

- Use a Task List of tasks you need to complete each day

- Establish Working Hours

- Schedule regular meetings to build a more structured day

- Take breaks to refuel and refocus

- Reward yourself for a well-done job

- Set boundaries and quit working when the day is done

- Share your experience with other co-teleworkers or friends who telework.

Source: istockphoto.com

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2. Calculating money saved by teleworking

Teleworking can help employees save money, as it is indicated in the chapters above. There are various online calculators available, which a teleworker can use for estimating how much money can save while working remotely.

One suggestion is to use the calculator provided by Confused.com, which is available for free (does not require user registration). It is an easy-to-use, step-by-step tool that provides the user with information about how much money can save by working remotely. The information required to be filled out by the user regards commuting and spending money habits during regular workdays.

- Note: This tool uses the English pound and mile as measurement units for money and distance respectively. So, don't forget to make conversions to your currency (e.g., euro) and metric unit (e.g., kilometers). These conversions can be conducted after performing a simple relevant Google search.

Useful links

- Best Jobs for Telecommuting -
  https://www.lifewire.com/best-jobs-for-telecommuting-2377295
- Data Literacy for the Data-phobic: 7 Things Beginners Need to Know -
  https://venngage.com/blog/data-literacy/
- Working from Home: How to Set Up Your Workspace -
  https://www.youtube.com/watch?v=tMTxikrSe8g
- Ergonomics Expert Explains How to Set Up Your Desk -
  https://www.youtube.com/watch?v=F8_ME4VwTiw
- Working from Home: 10 Tips to Stay Motivated and Productive -
  https://www.youtube.com/watch?v=Sv0_1pEfhWI
- Challenges of Working Remotely -
  https://www.youtube.com/watch?v=EVI39iu8_lY
- Working from home savings calculator
  https://www.confused.com/working-from-home-calculator

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