

Article

# Digital Media Domestication and Job Paths Among Older People: An Ethnographic Investigation

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## Abstract

While it is true that ageing dramatically affects the sustainability of welfare systems, increasing life expectancy in most Western countries is also seen as an opportunity to live longer and better: The healthiest older people are also the most dynamic in terms of work activity and social and cultural capital. In this debate, media and communication technologies are often seen as tools to enable older people to age actively, thanks to their potential for inclusion. The empowerment of older people through the use of communication technologies is strongly influenced by the social and family context in which digital media are used and by the formal and informal contexts in which their use is learned. Starting from this context, this article investigates the relationship between career paths and the use of digital media among older people. We conducted 20 in-depth interviews and ethnographic sessions with Italian internet users aged over 65. The results show how their current condition (retired or employed) and the job previously held have a fundamental impact in both the processes of domestication of technologies and internet use, but also in the structuring of the home itself and the positioning and use of technologies in the domestic space of older people.

## Keywords

active ageing; digital media; gender differences; information technology; job status; seniors' communication

## Issue

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## 1. Introduction

Most countries all over the world are now ageing societies (United Nations Department of Economic and Social Affairs, 2020). Italy, in particular, is among those with an older population (Istituto Nazionale di Statistica, 2020) and is at risk of suffering negative consequences. An ever-growing number of older people entails increased welfare-related costs (pensions, health-care) and a reduction in the country’s workforce, followed by a limited ability to create new resources and wealth. However, when older people have “resources” (personal, cultural, and social) fit for active ageing, they can continue to be assets for society (Walker, 2002).

In the context of active ageing, work status is a pivotal factor, as it enables older individuals to remain “generative” in their family and social roles, as coined by Rossi et al. (2014), through the concept of old age activation or “productive ageing” as critically discussed by Morrow-Howell and Hinterlong (2001). Furthermore, in addition to work conditions, the development of digital competencies appears to impact active ageing positively. Studies suggest that using Information and Communication Technologies (ICTs) can mitigate the negative effects of ageing and promote wellness among older individuals. However, it should be noted that other research challenges the direct and definitive relationship between ICTs’ use and the well-being of older individuals,

as noted by Wei et al. (2022). Moreover, considering the growing role of ICTs in many workplaces and professions, where digital technologies increasingly dominate the job market, older individuals can benefit from learning to use these technologies effectively (Hänninen et al., 2021).

In the research on the relationship between the use of ICTs and ageing, gender seems to matter too. According to the data collected by Colombo et al. (2015), only 21.3% of Italians in the 65–74 age bracket own a PC. Of those over 65 who have never used the internet, 81% are women, and 65.6% are men. This gender gap is likely due to a different—past or current—work status: Half of older digital users (49.8%) declare that they learnt to use a PC in the workplace, and of those, 57.8% are men, while women are significantly less likely to have done so (37.6%; Kim et al., 2017).

The use of ICTs and work conditions are thus both very important aspects to consider in order to understand active ageing processes and gender differences among older people. Unfortunately, studies focusing on the relation between the use of ICTs in the everyday life of older people and their work status, or which take into account the gender factor, are limited.

To reduce this gap, the present research aims to investigate if and how work status and history, together with gender, influence access, use, and the processes of ICTs domestication in older people.

## 2. Literature Review

An increasing body of empirical research has addressed the adoption of ICTs among older individuals to promote active ageing (Colombo et al., 2015). Several studies have investigated the impact of ICTs use on various aspects of older individuals' quality of life, including mental wellness, social relations, level of independence, and personal autonomy, as evidenced by Sims et al. (2017) and Wright and Query (2004). Additionally, numerous studies have explored the effects of work conditions on the ageing processes, particularly in relation to ICTs use. These studies shed light on the literacy processes of older workers in the context of ICTs and their relationship with occupational well-being. ICTs seem to specifically alter the work context, and their use at a later age positively impacts employment status and career (Charness, 2006). Biagi et al. (2013) stress how older employees who can use a computer at work have more chances to be kept in the workforce longer, thus postponing retirement while still feeling active, useful, and motivated. Also, Friedberg (2001) notes that older employees who are unable to use a PC are more likely to retire early, and other studies find a direct connection between low technological competencies and low professional fulfilment in older workers (Schleife, 2006). They have ICT knowledge that is inferior when compared to their younger colleagues. This could determine, in the medium term, a polarization in the job market among older professionals between those who can keep pace and those who are unable to meet

the new requirements and therefore are at risk of being let go, demoted, or receiving a pay cut (Caparrós Ruiz, 2020). Zaccaria et al. (2022) examined digital competencies in older employees in relation to their professional profiles. According to their study, higher qualified positions require higher IT competencies, not only in the service sector but also in traditionally less innovative fields such as the industry.

Of the studies looking at the current work condition of older digital users, few are trying to understand how ICTs are overall intertwined with the professional history of present and former older employees, or how different career trajectories are related to gender. Based on the available, albeit limited data, it can be seen that previous work conditions may influence the adoption of ICTs among older individuals. Specifically, working in an office at the white-collar level has been identified as a potential factor that can impact older people's internet use, as highlighted by Arief et al. (2018). For example, competencies acquired at work, such as digital elaboration of texts and spreadsheets, use of e-mails, video calls, and internet surfing, can affect older people's various modes of ICT use outside the workplace (Cavapozzi & Dal Bianco, 2021). Retirement tends to reduce IT literacy and frequency of internet use regardless of gender (Cavapozzi & Dal Bianco, 2021). Moreover, according to Cavapozzi and Dal Bianco (2021), the negative effect of retirement on ICT knowledge is more relevant to office workers whose jobs involved intense use of advanced digital competencies, as opposed to blue-collar workers who learned to use ICTs and continue to do so in their free time.

Overall, research on the relationship between ICTs, older people, and work background often lacks adequate attention to the gender dimension, despite the growing body of literature that emphasises the importance of gender in ICT use and the acquisition of digital skills in everyday life (Kim et al., 2017).

Furthermore, the limitations of research on older people and their use of ICTs are often attributed to methodological individualism, which focuses on individual characteristics such as age, employment, ethnicity, and education, without considering the contextual and relational dimensions of ICT use (van Dijk, 2012). To overcome this limitation, we suggest reviving the theory of domestication proposed by Silverstone and Hirsch (1993) which underscores the significance of the household as a physical and symbolic space for the integration of technologies into people's daily lives (Khvorostianov, 2016).

The domestication theory offers a valuable framework for understanding the naturalisation processes of digital media in the daily lives of older people, the stabilisation of usage patterns of new devices, the social and cultural construction of their uses, and the influences of social and family networks in the incorporation of ICTs (Airola & Rasi, 2020). It presents the adoption of new digital media as an evolutionary process resulting from the domestication and re-domestication of technologies through remediation processes (Bolter & Grusin, 1998).

Currently, there is limited research that combines an examination of the work background of older people and their use of ICTs with a comprehensive approach to family and social contexts, as well as the domestic environment, which is, in turn, influenced by the work history and life trajectories of older individuals. Thus, incorporating a domestication perspective into research can provide a more nuanced and holistic understanding of the complex dynamics between older people, ICT use, and their social context.

Based on this theoretical grid, the present study intends to carry out an in-depth study of the relationship between the use of ICTs and the current—and past—work background of older people, using a research approach linked to the domestication theory (Haddon, 2000) and carefully considering the gender dimension.

### 3. Research Questions and Methodology

Our research aims to investigate the relationship between the adoption and use of digital technologies and the previous work conditions of older people.

In relation to the aforementioned theoretical grid, the following research questions were posed:

RQ1: How do older people’s biographies and professional trajectories affect the decision to use digital technologies?

RQ2: How do older people’s biographies and professional trajectories affect digital competencies and types of devices used?

RQ3: How does gender affect biographies and attitudes towards ICT use in adulthood?

To answer these questions, we submitted face-to-face questionnaires (between December 2013 and January 2014) nationally to a statistically representative sample of 900 older people aged 65–74, with an average age of 69.43 ( $DS = 3.01$ ). Using the questionnaires’ preliminary data, in May 2014, we carried out 20 non-structured in-depth domestic interviews with 20 65–74-year-old ICT users, all residents of Regione Lombardia (Italy).

The qualitative snowball sampling technique was employed to select participants based on various criteria, including age, family composition, geographical context (town or city), and ownership and use of digital media and devices. Structural variables such as past and present employment, education, and income were not intentionally considered during the sampling process and may have emerged randomly from the sample. In Table 1 we have reported the main characteristics of our sample.

The approach for analysing the interview transcriptions followed the grounded and inductive method proposed by Strauss and Corbin (1994), with analytical categories being inductively derived from the data without predefining them prior to reading the interviews. Recurring categories, serving as the themes of analysis, were identified using a comparative method by the research team members. The processing of recurring data and themes was based on the original language audio transcriptions of the interviews, following the grounded theory approach suggested by Glaser and Strauss (2017). The present article will only report the ethnographic data collected during the study. The results

**Table 1.** Ethnographic study: Sample.

Name	Gender	Age	Current/Past employment
Ida	Female	69	Retiree/office worker
Maria	Female	65	Retiree/teacher
Mariella	Female	71	Retiree/homemaker
Irene	Female	69	Teacher
Marisa	Female	68	Retiree/office worker
Ernesto	Male	71	Retiree/artisan
Giuseppe	Male	67	Contractor (construction)
Leonardo	Male	67	Artisan
Enzo	Male	73	Retiree/construction worker
Teresa	Female	72	Retiree/homemaker
Franco	Male	66	Sales consultant
Carmine	Male	67	Insurance agent
Sergio	Male	72	Retiree/office worker
Maria	Female	74	Retiree/homemaker
Nadia	Female	65	Business owner (restaurateur)
Roberto	Male	70	Retiree/teacher
Eugenio	Male	71	Retiree/labourer
Michele	Male	68	Retiree/office worker
Bernardo	Male	69	Retiree/office worker
Giuseppe	Male	69	Retiree/office worker

of the questionnaires have been detailed in another publication (Carlo & Buscicchio, 2022).

#### 4. Ethnography

The research aims to investigate how the adoption of ICTs among older people is affected by their biographies, how this use develops in time and space, and how media-related routines are shared within the domestic context.

##### 4.1. Work, Retirement, and New Free Time

As shown in Table 1 and in accordance with the data on older people's employment in Italy, almost all of the interviewees are currently unemployed. They are mostly retirees with work experience, but also homemakers who have never held a stable job. Because of their inactivity work-wise, their practices and habits in media use relate to an abundance of free time.

While processing the interviews, in the first phase, we divided the sample based on time management, and the following categories emerged as themes from the analysis of our transcriptions: "free time," "freed time," or "working time."

The first category comprises all individuals who define non-working time as "free time," such as homemakers and long-time retirees: Their free time surpasses that allotted for necessary tasks (sleeping, washing up, getting dressed, cooking, doing housework, going grocery shopping, etc.) and it is a part of their daily life. This group adheres to a standardised free-time management, less variable and problematic, and more stable:

I usually start my day by getting up slowly, enjoying a calm morning. After breakfast, I like to check my Facebook for a while. Then, I usually go out for some small shopping errands and have lunch. I may take a short nap in the afternoon before spending more time on the computer. Later in the day, I go to pick up my grandson, and when my daughter comes over, we have dinner together. We usually watch television in the evening, and I might spend a little more time on the computer before going to bed. (M, 71, retiree/labourer)

The second category, "freed time," includes newly-retired individuals (in some cases retired with part-time work). Their perception of free time is deeply affected by the opposition between before ("when we used to work") and after ("now that we don't work anymore/work less"). For some, the still-fresh change is managed with difficulty, tension, and frustration: Time freed from work is seen—more or less explicitly—as "forced inactivity" due to the loss of their productivity. Therefore they feel a great urge to employ this time usefully to avoid feeling that their free time is "too" void: Free time has significance for all older people, but in particular, for recent retirees who are experiencing a period

of transition, for them it is strongly connected to the realisation of their new identity as a non-worker. They feel unproductive, exiled from the world of "doing with purpose" to that of "doing just for doing" and "doing to pass the time."

Lastly, we grouped into a third category all older people who continue to work, although at a less intense rhythm than before. Their free/freed time is managed similarly to as it had been in their working life. They are older people who spend most of their day out of the house, at the workplace, and who have yet to face the radical transformation in time management caused by retirement.

In this context, the use of digital media is part of a bigger effort to "give shape" or "give value" to time. The frequency and intensity of media (digital and non-digital) use strictly depend on the importance and the perception that older people attribute to their free time.

##### 4.2. Professional Biographies and Forms of Digital Appropriation

The interviews allowed us to outline three distinct older people profiles: Older "white collar" retirees (teachers and office workers in the 1990s); older "blue collar" retirees, i.e., labourers and homemakers in the 1990s; and older people who still work.

###### 4.2.1. Older "White Collar" Retirees

It is the most significant among the interviewees. A good number of those older people who are now digital users started to employ ICT in the workplace:

At work, toward the end of the 1980s, we started to use terminals for data input; there was no internet and such. I remember I was one of the first in the office to do so; it was a shock for many of my colleagues. (F, 68, retiree/office worker)

They are older people (mostly men, with a residual number of retired women ex-professional workers), former office workers, teachers, and professionals of the service sector who, during their final years of employment, experienced the digital transformation of the 1990s and quickly saw typewriters replaced by word processors, written notes by e-mails, manual calculation by spreadsheets. They learnt word processing, data entry, and to use the Office suite and software for accounting and order management in the workplace. Almost all of these older people purchased domestic PCs and internet services before their network of family and friends: "By using it in the office, I quickly realised it was very useful, so around 1998, I was one of the first among my acquaintances to have internet at home" (M, 69, retiree/office worker).

IT literacy in the workplace served, for those interested in it, as a step into the digital world: Professionals

from the 1990s (older people nowadays) could grasp earlier than others the advantages of ICT adoption. This group of older individuals have now reached complete ICT domestication and has also been able to help more family members in learning PC and internet use, particularly their children, for school-related purposes:

Now he [my son] is showing me little tricks and apps, but he has forgotten that I was the one who taught him how to use the PC for homework, since in 2000 I had already been using it for a while at work, and he was still awkward about it and afraid to get it wrong. (F, 69, retiree/teacher)

These families, both older parents and children, have embraced digital technologies and have supported each other in learning how to use them over the years. Initially, the parents taught their children about information technology from an early age, and now the digitally-savvy children reciprocate by teaching their parents about new digital services. The process of adopting and learning about technologies is familiar and ingrained in the household's history, creating a sense of continuity and shared knowledge within the family. For this group, PCs and internet in the 1990s mainly represented "useful" tools needed for writing and printing documents, searching the internet for/with their children, sending the first e-mails, keeping track of the family's budget, archiving digital files—their domestic use implements skills learned in the workplace and—at least at first—leaves little to no time for leisure:

I was already using the PC at work, so at home, I only needed it for stuff I couldn't delay, like getting the train timetable, checking my inbox for new e-mails, and searching for a restaurant address; and it was 5 minutes max. (M, 72, retiree/office worker)

The role played by technologies in older people's everyday life evolves when they retire: it acquires a new meaning given the huge amount of available free time. The task-based approach (processing data through software created in the 1990s such as the Office suite) is complemented by a time-spending, leisure-oriented one that entails a progressive switch from the *PC* to the *net* world: "When I used the PC at work, it was quite restrictive, instead after I retired surfing the internet at home became a whole different matter" (M, 69, retiree/office worker).

Regardless of the growth undergone by ICTs as leisure tools, even after years have passed, there are still visible effects of the "imprinting" received by these former workers during the first phase of the ICT domestication process in the 1990s. They continue to consider the PC as an instrument that is "useful" first and "fun" next. They are used to employing the PC for online eCommerce, eBanking, eGovernment, and eHealth services: As individuals, they were enthusiastic witnesses to the potential of the PC and internet to complete rou-

tine bureaucracy-related duties when dealing with public administration offices, banks, energy providers, online retailers, etc. From this viewpoint, the desktop PC is still the terminal needed to access a series of important services and thus simplify day-to-day life, just as it was in the 1990s for office-related matters.

An additional continuity link to their past use of the PC is represented by the prevalent setting and time chosen by the present-day older people: The PC is mainly used in the children's (now living on their own) bedroom or likely in a separate room, significantly referred to as "the office" or "the study." The dynamics of technology use in these families have shifted over time. Previously, the computer in the household was primarily used by the children, but now it has become the domain of the (new) parents. The children's room has undergone a transformation and has been revalued with a new function as the parents take on the role of technology users, reflecting the changing dynamics of technology adoption within the family: "My son's bedroom has now become my new retiree's office, I have the quiet I need, and nobody bothers me there, I've got my PC, my printer" (M, 68, retiree/office worker).

Such rooms are actually quite often very similar to proper offices, where the desktop PC with its set-up (printer, keyboard, mouse, USB ports, etc.) is the real IT device around which all ITC practices revolve: smartphones, tablets, and even laptops are still seen as "playthings" not suitable for completing complex tasks.

As regards the times of use, it is interesting to notice how they, for the most part, overlap those of a regular office schedule (morning-to-afternoon times on weekdays), while evenings and weekends are reserved for spending time with the spouse and the family (watching TV, going out), and the PC is turned off (just as when they used to be employed):

I really keep an office schedule: when I wake up in the morning, I turn on the PC, then I'm back at it after lunch, then I take a nap, and then I use it again until dinnertime...I'd say I usually spend 6–7 hours per day at the PC. (M, 72, retiree/office worker)

#### 4.2.2. Older "Blue Collar" Retirees

They are workers who, up until the 1990s, had been employed in positions that did not require being able to use a PC (factory workers, artisans) or those who were not employed (homemakers, mainly female)—they did not learn how to use ICTs in the workplace and only recently started to use digital media: "I'd never used a PC before, I was a mason; didn't need it much, didn't need it at all" (M, 73, retiree/construction worker).

Many of the school-aged children in this group of older people had not been active users of computers in the past, and thus had not been a catalyst for the digitalisation of their families over the years, as observed in the previous category of older people.



Within this group, there is a notable awareness of the technological gap they face compared to their peers who had more opportunities to use ICT in their lives. This awareness is often more pronounced among women, who attribute their lack of familiarity with ICT to their roles as housewives. Older women, in particular, are conscious that they have experienced the digitalisation process to a lesser extent than men, due to their previous job positions: “I’ve always been a housewife and, up until now, there hasn’t been a need for a computer...maybe now with recipes on the computer, things will change...[laughs]” (F, 71, retiree/homemaker).

Their former profession is considered the determining factor in tracing a life trajectory more or less touched by the digital media world:

I look at my friends and relatives who used to do a desk job and already 10, 20 years ago had a PC at home: I started to use it only two years ago, and for me, it was literally the first time sitting down and typing. (M, 71, retiree/artisan)

They are older people who have only recently acquired a PC at a time when their children already live elsewhere. Therefore, the impulse to make a purchase comes not from a real necessity but rather from a general curiosity toward the new digital world and a vague desire to keep up with the times. They decided to get a PC and an internet connection after reading newspaper articles, watching TV broadcasts, or through acquaintances who are frequent users. Still novices to the digital world, their approach is explorative and tentative due to quite basic digital competencies. They retain a certain enthusiasm for the possibilities opened up by the internet, also in terms of public utility services, but their main reason for using ICTs is leisure: “I have to admit that in the end, I spend a lot of time playing games and quizzes” (F, 74, retiree/homemaker).

Because their use of PCs and the internet is brand new and their children do not live in the house anymore, these older people are largely self-taught: “I took my time, and I learned by mistake, on my own, like I always did with everything in my life, even work” (M, 73, retiree/construction worker).

They sometimes feel compelled to attend IT literacy courses, putting themselves in a “training” perspective interestingly not so dissimilar to what is required when starting a new job:

My children got me a PC for Christmas, and I told them, “ok, but I first need a course so that I don’t make mistakes.” I was worried to be no good. So I enrolled, and now I can use it. It’s like a new job; before you start, you have to go to school and learn how to do it. (F, 72, retiree/homemaker)

A professional background lacking office experience means these older people are initially faced with an often

serious difficulty handling a keyboard and mouse and coordinating their fingers when typing. It is not a coincidence that most of them lean toward “touch” devices such as tablets and smartphones, which are more intuitive and easier for those who have never owned a PC:

For me, the PC is something completely new, and also the keyboard; I never even used a typewriter when I was young. That’s why I decided to buy a tablet, you just use your finger, and it’s the same; actually, it’s better. (M, 71, retiree/artisan)

Not having or under-using the PC in favour of a tablet brings to the table a series of differences also in terms of services utilised, since the use of words and data processing software (e.g., Word Office and Excel Office) is drastically reduced, and digital activities are almost entirely limited to the internet and a few specific apps (Facebook, Whatsapp, YouTube, selected apps for public utility, financial and phone services, and games). In this instance, we are considering users who only partially exploit the potential of the net; those who access a restricted variety of services with a clear preference for entertainment and social content. Where older people falling into the first category mainly see ICTs as a world of useful services and information (and of tools to perform better, as is the case for the third group), the present typology of older people is most of all drawn to the internet and the digital context for its leisure and time-passing value.

The limited usage of PCs and the widespread reliance on mobile digital media devices also influence the spatial arrangement of the home. There is no longer a need for a designated “place” to use a PC or a bedroom converted into a study.

Any location within the home can be used for utilising tablets and smartphones, which in turn affects patterns of usage time (often extended), labels associated with ICT usage, and family routines: “For instance, my husband often watches TV, and I sit nearby with my tablet. There have been times when I even used it while we were eating, but I realised it was becoming excessive and decided to stop” (F, 72, retiree/homemaker).

#### 4.2.3. Older People Who Still Work

As shown in Table 1, this category includes the lowest number of older people, those who were still active workers when the interviews took place. This condition has a strong impact on the management of free/freed time and on ICTs use. These individuals (mainly male) have considerably less free time compared to retirees and are often out of the house and at the workplace. These older people use the internet during their limited free time, typically on weekends, they access it from a home computer shared with their partner and children.

An initial dividing criterion within this group is between those working in a position entailing ICT use

and those with jobs that do not necessarily require a PC or the internet. The first individuals are office workers (insurance agents, consultants, brokers) who use the PC for contacting clients/providers but also for managing applications and software specific to the job. They show high skillsets and heterogeneity of ICTs uses—their professions were key in keeping them up-to-date, frequently even in a sort of competition with younger generations of colleagues:

I'd say that I don't have big problems with technologies; I simply grew and grew old with them, and at work, whether it is to manage orders or to use the tablet for presenting offers, I don't feel less capable than my younger colleagues at all, they are faster, but I have more experience. (M, 66, consultant)

The ability to use ICTs in the workplace transfers to the private sphere, although the reduced time availability does not allow for much use for leisure-oriented services:

I work all day long in front of a PC and in the evening I turn everything off, even my mobile. To me, the PC is a work instrument, and that's all; my wife takes care of looking up the grandchildren on Facebook, because she has more time and is better than me with this stuff, but when it's time to file the tax income she passes the mouse back to me. (M, 66, consultant)

These older people employed in highly-digitalised positions are, therefore, very competent users of the Office suite and other work-related software but are less secure (and involved) regarding social media:

I can file an insurance policy form in a flash, but when it comes to uploading pictures on Facebook, I'm always afraid of making a disaster, but maybe it's more important to know how to use the PC at work; all the rest is nonsense I don't really care about. (M, 67, insurance agent)

The second sub-group includes still active older people who work as artisans, small business owners, restaurateurs, and employees in positions which do not involve much ICT use. These individuals use ICTs mainly in their (scarce) free time, for personal matters, and only marginally for their job. For them, ICTs represent the symbol of a dangerous leap forward and the symptom of a progressive inadequacy, personal and professional alike:

I recently learned to use the PC at work by myself, but only because my accountant forced me to open an e-mail account...I'm an artisan; my customers come to the shop. My nephew gets angry and tells me, "Uncle, if you open a website, people will know how to find you," but I'm going to retire in a few years, now is not the time to get into this mess. (M, 67, artisan)

Such limited use of technologies in the workplace corresponds to equally limited use in non-work-related contexts, further hindered by the lack of free time that often makes an explorative approach to technology impossible:

My girlfriends spend a lot of time on the PC and now are very good, but I'm always busy and remain a dud: I can send an e-mail alright, or search the internet for a provider, but for me, it's really hard. (F, 65, restaurateur)

Lastly, there is a third sub-group of older people who still work, who learned to use the PC (either by themselves or thanks to a training course) as a specific choice in the perspective of a change or betterment of employment. IT competencies are considered a necessary skill to possess to stay competitive in an ever more digitalised job market:

I did it because I wanted to change jobs and my company wasn't doing so well...so, about six years ago I attended a basic IT course, in order to learn how to write a C.V., to search for jobs online...I was worried nobody would want me if I didn't know how to use a PC. (M, 67, insurance agent)

The company shut down, so three years ago, I started to work as an English teacher and translator, and I also attended an IT course because I needed it to write, translate and send files—but also to gather teaching resources and ideas online. (F, 69, teacher)

## 5. Results

Our study investigated personal histories and biographies that facilitated the introduction of ICTs into domestic contexts and the way they are linked to current occupation, work background, and gender.

In order to answer our research questions, we conducted an ethnographic survey to hear directly from the people involved about the ways in which ICT domestication entered their everyday life and to observe the domestic and spatial context in which this domestication took and is still taking place (Silverstone & Hirsch, 1993).

As regards the RQ1, how older people's biographies and professional trajectories affect the decision to (or not to) use digital technologies, after the interviews, results show that older people who experienced the digitalisation process in the workplace and those who are still working spend a larger amount of time using ICTs at home as well, compared to older people who had never worked in digitalised contexts or are currently retired. This fact is also supported by other studies that note how a large number of older people learned to use ICTs in the workplace (Colombo et al., 2015) and how still actively working (especially in certain sectors) can favour ICT use even outside of the home (Zaccaria et al., 2022).

In the context of RQ2, this study underscores the significant interplay between older people's professional background, current occupational condition, and adoption of digital competencies and types of devices used. Time management, which is influenced by factors such as being active at work, retired for a short or long time, and one's perception of time as "free" or "freed," has a direct impact on the use of ICTs in terms of time allocation and the type of services used, whether it's more focused on leisure or utility. For instance, female homemakers, who have family commitments and housework responsibilities, reported spending considerably less time using digital devices such as smartphones and tablets compared to recently-retired male office workers, who may have longer stretches of free time and higher levels of ICTs use, or still-working older individuals, whose ICTs use is closely tied to their work schedule.

Furthermore, there is also a variation in the types of digital services used by older people based on their professional backgrounds. Those who became digitalised at work tend to favour PCs with a traditional keyboard-mouse-printer set-up, whereas newly-digitalised older individuals use tablets and smartphones more commonly. Additionally, the latter group tends to be more familiar with leisure-oriented content, while the former, who were digitalised in the workplace and are more frequent users of ICTs, demonstrate better proficiency with utility services. Moreover, still-working older individuals in digitalised contexts often have limited time for exploring entertainment services and primarily view ICTs as professional tools.

The above results on work status related to the use of digital services align with Cavapozzi and Dal Bianco (2021), whose focus is on the double-edged effects of retirement on older people's ICTs use: On one hand, retired individuals no longer feel pressure to always be up-to-date on IT technologies and services that could determine their professional value (word processing, spreadsheet, e-mails, video calls, data input); on the other hand, exiting the occupational world increases the free time available to older people for ICT use, thus increasing their ability to learn by doing and their exposure to communication and social networking tools.

In order to answer RQ3 on how gender affects biographies and attitudes towards ICT use in adulthood, first, we must consider that the interviews have outlined the following: The large majority of the "white collar retirees" older people (highly digitalised and long-term ICT users) are males (former office workers in particular), but the presence of fully digitalised women among them is minimal. They are mostly former teachers who started using technologies at work (teaching materials such as Word files and Office-processed slides) and are still actively interested in new learning. However, the data shows that women generally possess less IT knowledge and, consequentially, fewer technological devices and a more sporadic frequency of ICT use. Indeed, this study highlights that the lesser knowledge of ICTs among older

women can be attributed to a working past that had not been digitised or provided limited exposure to digital technologies, and the effects of this can still be seen in the present. These findings are consistent with previous research that suggests the persistence of a digital gender gap among older adults, even though it may be closing among younger users. Older women tend to lag behind men of the same age in their adoption of ICTs, and this gap has become entrenched with time (Sala & Gaia, 2019). This study aligns with the "trajectory of life" perspective proposed by Kim et al. (2017), which emphasises that previous professional experiences, competencies, and knowledge acquired at an earlier age all contribute to shaping the present behaviours and attitudes towards ICTs, including gender differences in ICT use among older people.

## 6. Conclusions, Implications, and Limitations

Our findings shed light on the importance of moving away from an individualistic and biological approach when discussing the relationship between older people and technologies. Many studies on active ageing have been criticised for overly focusing on older individuals' personal traits and choices while neglecting the social dimension and context in which both the domestication of ICTs and ageing occurs (Carney, 2017; Tadic, 2018; van Dijk, 2012). Similarly, the use of the term "active ageing" itself may be problematic as it risks evaluating the well-being of older people solely based on their productivity, health, and individual characteristics in the present (van Dyk, 2014).

To gain a deeper understanding of how ICTs are integrated into the lives of older people, it is crucial to consider how ICTs are intertwined with their biographical trajectories beyond just their current ICT use patterns (Walker, 2002). This requires an approach that goes beyond studying the current status quo and delves into the "past," including life trajectories, work histories, media use patterns, and personal and generational histories that shape the ageing processes. Factors such as past professional experience, family relations, and spatial organisation within the home strongly influence older people's access to and use of ICTs. For example, the spatial arrangement of ICT in homes, such as having a dedicated "children's" room with a fixed computer, can significantly impact ICT use patterns, in terms of time spent and services used, compared to those who use mobile devices (smartphones and tablets) throughout the house. This highlights the importance of considering the domestication process of ICTs in older people's lives, in line with the theoretical approach of domestication, and moving beyond individualistic notions of technological gaps and inequality when studying ageing and ICTs.

It is evident that age in itself or any alleged innate difficulty toward using ICTs are not the primary influencers of older people's attitudes towards ICTs. Instead, social contexts and biographies (personal, professional,



generational, domestic) play a predominant role in shaping the presence and significance of ICTs in their lives. The study of the spatial arrangement of ICTs in homes is particularly intriguing as it reveals the acquisition processes, use biographies, history of technology adoption, and moral economies and routines associated with technology use, in alignment with the theoretical approach of domestication. For example, having or not having a “children’s” room with a fixed computer involves a profoundly different use of technologies in terms of time spent and services used compared to those who do not have such a room and use mobile devices (smartphones and tablets) throughout the house. On the one hand, this confirms the validity of a domestication model applied to understand said occurrences; on the other, the necessity to look beyond the individualistic notion of technological gaps and inequality when talking about ageing.

Furthermore, our research highlights the significant role of gender in shaping older people’s digital inclusion and opportunities for active ageing. We found that older women tend to be less involved in the digitalisation process than men, which can be attributed to differences in professional roles, education levels, family responsibilities, and job opportunities. These disparities, rooted in historical and societal norms and expectations, persist in old age and contribute to lower rates of digitalisation among older women.

Our findings emphasise the need to move beyond an age-centric approach and consider a range of factors, including social context, gender, education, and personal history, in understanding the complexities of older people’s attitudes and behaviours towards digital technologies. They highlight the importance of developing inclusive and gender-sensitive policies and interventions that address the diverse needs and experiences of older people in the digital era and promote opportunities for active ageing for all individuals, regardless of age or gender (Paz et al., 2018). This underscores the urgency to rethink digital inclusion and active ageing policies, taking into account the analysis of different ageing and ICT use processes between men and women (Kim et al., 2017; Setfester & Lovegreen, 1998). It is crucial to recognise that gender plays a significant role in shaping opportunities for active ageing and digital inclusion among older individuals and to address the long-standing inequalities faced by older women in their access and use of digital technologies throughout their lives.

Although our research has employed an accurate methodology, it is not without limitations. One limitation of our research pertains to the qualitative nature of our methodology, which restricts the generalizability of our results to other contexts, including geographical ones. Future studies could consider incorporating qualitative findings with more extensive quantitative investigations to enhance the robustness and external validity of the research.

Another limitation is related to the selection of the group of older individuals, which was carried out

using the qualitative snowball sampling technique. This approach may result in a non-heterogeneous sample comprised of individuals from similar social and cultural backgrounds, potentially limiting the diversity and generalizability of our findings. Exploring alternative sampling techniques in future research could address this limitation and ensure a more representative sample.

Finally, a further limitation is the currency of the data, which was collected in 2014. Given the dynamic nature of technological advancements and changing societal trends, conducting a follow-up study with more recent data would be valuable in examining the current state of the phenomenon under investigation.

In conclusion, while our research has adopted an accurate methodology, it is important to acknowledge these limitations as they provide opportunities for further research and refinement of our findings in future studies.

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### Conflict of Interests

The author declares no conflict of interest.

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