Digital Literacy
AMONG SENIOR CITIZENS
IN INDIA

A Research Project under
Symbiosis Social Involvement Program (SSIP)

Digital Literacy Among Senior Citizens in India

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Preface

Having grown up around grandparents and senior communities, we have all been beneficiaries of the vast knowledge and experience that our elderly possesses. We have also been witness to the unique challenges and lack of resources that are a recurring hinderance in this journey of ageing.

Historically, communities, families and societies have always lent a shoulder to the ageing, but as the youth embrace the journey of becoming digital nomads and migrate across the globe, our seniors find themselves in unwilling social isolation- existing on the periphery of technological changes and improvements; rarely being able to benefit, enjoy or better their own lived experiences via technology.

We embarked on this research project with the objective of bringing our elderly within the digital fold, enabling them to lead independent and dignified lives while partaking in the ease and comfort that technology today offers. Numerous hours of desk research and brainstorming sessions helped us distil our scope, objectives and recommendations enclosed within.

Our aim to study the digital literacy of seniors in our country was not only to bridge the digital divide but also because we fundamentally believe that digital platforms will add value to the lives of seniors. Daily tasks performed by them will be simplified- ordering groceries from online delivery stores, booking cabs or making bank or UPI payments will become faster and hassle free when done digitally.

Just like children, seniors also display a keenness to learn and a curiosity about the new-age technologies. Building trust-worthy environments that address their concern with care and understanding, was as crucial as making them digitally literate to fully revolutionize the way elderly view and use technology.

The physical fortitude of onboarding everyone on this digitally journey was near impossible in an offline setting; which is where online trainings led by our student volunteers was the best, most sustainable solution. This of course, is a stepping stone to our long-term vision of creating self-sustaining digital communities led by seniors themselves to share technical knowledge on their individual niche technical interests.

Our Research also branches into the financial literacy and social health and well-being of our seniors to draw a comprehensive study and analysis of their lifestyle, interests and behaviors. This helped us create nuanced recommendations and serve our elderly better.

At the onset of our research, we had an inkling that garnering overwhelming responses from our seniors, spread across the country could be a daunting task. Nevertheless, we were able to successfully leverage the vast student network of Symbiosis and gather 450+ responses in just one week.

In the on-field exercise of getting pan-India responses, not only did we engage in valuable conversations about the seniors' perceptions, anxieties and small victories in the online space but also carried back some heartwarming conversations that motivated us to pursue this cause further.

Lastly, dear reader, we thank you for picking up this research and engaging with this undertaking. We hope this cause resonates with you, with as much enthusiasm as it did for us. In our shared optimism for making technology accessible to senior citizens, we humbly urge you to actively participate in helping, guiding and supporting our elderly to the best of your capability.

Symbiosis Social Involvement Programme

About Symbiosis College of Arts and Commerce

Symbiosis is one of India's leading educational institutions, imparting quality education across diverse verticals for over five decades. The term Symbiosis is a botanical term meaning "different species living together for mutual benefit". What started off as "The Symbiosis International Cultural Centre" in 1971 has grown exponentially to more than 60 institutions in the last 50 years.

The Symbiosis College of Arts & Commerce (SCAC) is a member of this illustrious educational group which was born in 1983. It is an autonomous college affiliated to Savitribai Phule Pune University (SPPU) offering Under Graduate, Post Graduate and Ph.D. programmes in the field of Arts and Commerce. We are proud to have been granted Academic Autonomy in 2012 from UGC and were conferred status of 'College with Potential for Excellence' (CPE) in 2016 by UGC. We were accredited A grade in the previous two cycles of NAAC and Reaccredited 'A+' with 3.51 CGPA out of 4 in the Third Cycle. We have also been the beneficiary of Rs. 5 crores under RUSA 2.0 Component 8 for implementing quality initiatives in Higher Education. The latest milestone has been that we have been granted "Empowered Autonomous College" status by UGC from the year 2023-24 onwards.

Our 4 year UG degree programme under the new National Education Policy offer specializations in Marketing, Human Resource Management, Banking, Costing, Entrepreneurship, Economics, English and Psychology. We also offer integrated Professional Programmes in collaboration with professional chartered bodies in the UK like the Association of Chartered Certified Accountants (ACCA) Chartered Institute of Management Accountants (CIMA) and Institute of Analytics (IOA). We offer PG Programmes in Commerce, Economics, English and Psychology and PhD Programmes in Commerce, Economics & Psychology. The Centres for Study of Liberal Arts, Skill Development and Innovation & Entrepreneurship are vibrant hubs of student activity promoting critical thinking skills, entrepreneurial mindsets and acquisition of important soft and industry relevant skills.

We have multiple international collaborations with universities around the world leading to student and faculty exchange programmes, joint online academic programmes, scholars in residence and much more. Our Campus Placement has broken all previous records resulting in over 200 placements with renowned global corporates in the last academic year. Our students are our strength and our pride. They come from every corner of the country and the world, and we strive to empower them with skills, knowledge and wisdom to make a better world.
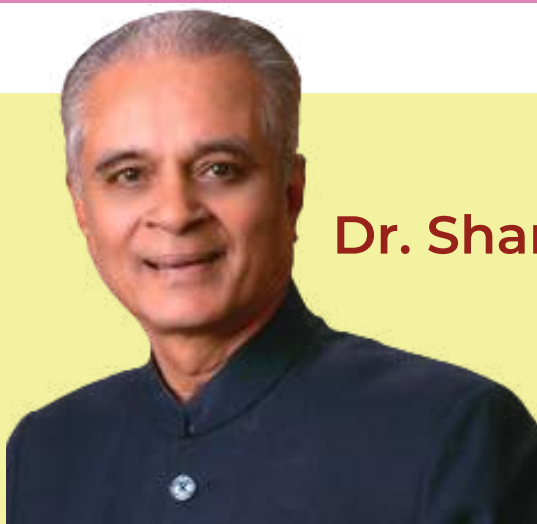
Dr. Shantaram Balwant Mujumdar

FOUNDER AND PRESIDENT,
SYMBIOSIS

The Symbiosis College of Arts and Commerce (SCAC) has undertaken an initiative on an important issue, namely "Digital Literacy among Senior Citizens". I am happy to see the results of the hard work and dedication of our students and faculty.

This project is an example of the sincere research that takes place at SCAC, where our scholars are engaged in exploring new ideas and finding solutions to the most pressing issues of our time. Our commitment to excellence in research will be reflected in the quality of work presented in the research report.

Digital Literacy among Senior Citizens is a subject I am deeply passionate about and feel pleased to see the endeavour come to life through our students.

The definition of 'literacy' has changed over the years, and in today's world, a truly literate person is one who can navigate the digital world for one's needs, growth and continuous learning.

Parents are left to lead lives in isolation when their children migrate for work or education to distant places. It is of paramount importance for the youth to bring our senior citizens into the digital fold and help them manoeuvre the highways of technology. This is a key objective our students hope to achieve through this research project and the ensuing volunteering exercises.

I give my blessings to the students for this project and pledge full support from the Symbiosis community.

Dr. Hrishikesh Soman

PRINCIPAL,
SYMBIOSIS COLLEGE OF ARTS AND
COMMERCE

The older generation is an embodiment of experience and wisdom. They possess knowledge about the Gita, Veda, Scriptures and Life. They are a guiding light for the future generations. The Digital World can be a means to exchange valuable information across generations and inspire the youth to stay connected to their roots in this dynamic world.

The ancestral knowledge that the senior citizens have and the modern technical know-how that the younger generations possess, should be exchanged and shared for mutual benefit and well-being.

Digital Literacy among Senior Citizens would help foster such an inclusive environment, and would also provide an opportunity for the youth to learn about the culture and traditions being passed on by our elders.

I wholeheartedly support the initiative undertaken by our students of Symbiosis Social Involvement Programme (SSIP) in promoting this cause and making senior citizens a central part of culture and society to benefit everyone.

Dr. Tessy Thadathil

VICE PRINCIPAL,
SYMBIOSIS COLLEGE OF ARTS AND
COMMERCE

" Promoting wellbeing at all ages is important to sustainable living. "

With fast paced technology and life getting increasingly digital, senior citizens find themselves sidelined in their communities, landing themselves in challenging situations. Discrimination on the basis of age is very often disguised and can go unnoticed in the flurry of everyday routines. But it is a growing issue that needs to be tackled on a priority basis, and whom else to entrust it to, than our own youth.

The Symbiosis Social Initiative Programme (SSIP) seeks to undertake social initiatives to foster wellbeing of marginalized groups. We are extremely happy to have received tremendous support from our management, principal, faculty and students in conducting this survey research under the aegis of SSIP, to find out the level of digital literacy among senior citizens.

The funding from Rashtriya Uchchatar Shiksha Abhiyan (RUSA) was extremely important for completion of this project.

There is one person I would like to make a special mention of is, and that is Mr. Rajeev Goel, the faculty mentor for this project. His industry experience, commitment, sincerity and equation with the students helped anchor this project and see it through to completion. I, on behalf of the SSIP team of Dr Sheena Mathews, Dr. Sharayu Bhakare, Dr. Zakira Shaikh and Dr Neha Agashe, would like to thank all who have made this study possible, and each and every student and senior citizen who contributed to this project. We look forward to planning and executing numerous initiatives in the forthcoming year for the wellbeing of senior citizens.

Rajeev Goel

FACULTY MENTOR,
SYMBIOSIS COLLEGE OF ARTS AND
COMMERCE

Growing old is a natural, biological process that all individuals go through. Higher health awareness coupled with modern medicine has modified this process of ageing to a point where longevity & life expectancy is constantly increasing and changing India's population demographics.

As people live longer, they are living more isolated lives due to nuclear families, urbanisation & children migration. While the youth has found avenues to connect online, it is imperative that seniors lead a connected and healthy life. To overcome these challenges brought about by age and social construct, our seniors need support which digital technologies, advancing & changing at a rapid pace can fulfil & have far greater reach than is possible purely in the physical world.

Our students in Symbiosis, who are born digital natives, understood the scale of positive impact that can be created by having digitally literate seniors. This came out from their experiences during covid where they served as tech bellwethers for the seniors in their family.

The research was done to understand first hand the level of digital literacy, how it is being used, pitfalls being faced and how the student community can come together to enhance the digital experience of our seniors in a safe, credible & trustworthy environment.

It was an honour to work with my students on this research, a great opportunity provided by Symbiosis, and support from our Principal Dr. Soman, and constant guidance from Dr. Tessy Thadathil, our Vice Principal to complete this research.

Digital Technologies provide personalization, connectedness, community fostering, fulfilment of services, information & our seniors can embrace, take advantage that digital devices provide to lead a healthy life.
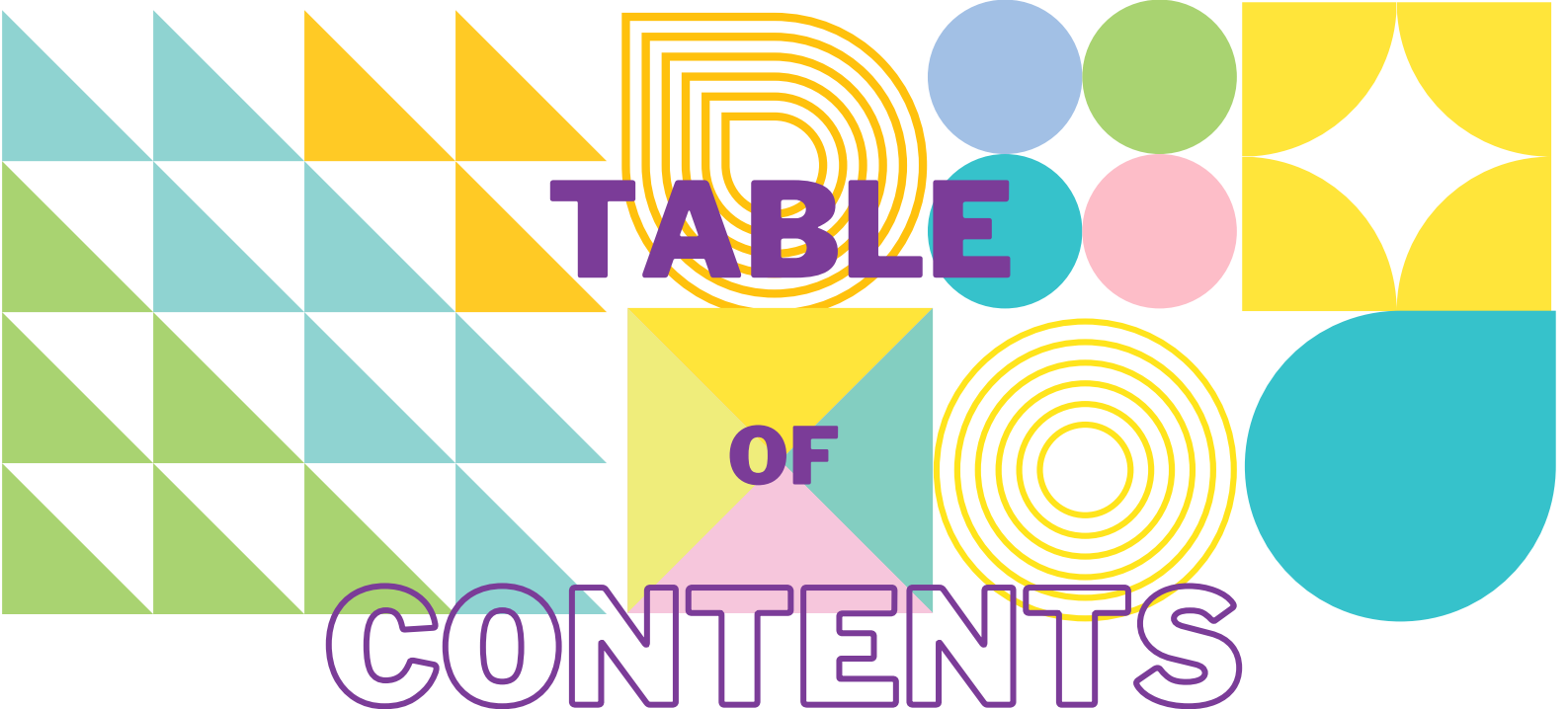
TABLE OF CONTENTS

SIGNIFICANCE
OF THIS
RESEARCH

"जीवनं जलदस्य तत्त्वज्ञानम्।"

(jīvanaṃ jaladasya tattvajñānam)

"Life is like a water drop;
wisdom is its essence."

This quote emphasises the importance of wisdom in life and suggests that just as a water drop is fleeting, so too is life. However, the essence of life, like the essence of a water drop, is wisdom. This quote encourages us to embrace the process of ageing as an opportunity to gain wisdom through life experiences. As we age, we accumulate knowledge and experience, which can help us live a more fulfilling life and make a positive impact on those around us. This quote reminds us that even though our physical abilities may decline with age, our capacity for wisdom and understanding can continue to grow.

Ageing

is a natural and an inevitable process - a true celebration of our life and experiences. It does mean that one may not feel at one's youthful best physically, but one is at a greater advantage in terms of experience, emotional strength and wisdom. However, there is no denying the fact that elders, referred to as senior citizens (in the age bracket of 60+) face numerous challenges in the modern world.

These challenges, which could be physical or mental, are further aggravated due to the fast changing technology and digitalisation which got compounded because of the pandemic.

While Covid boosted the pace of digitalization, we, the younger generation, got busy catching up with the trends and adapting to the technological changes in the society. We were quite successful at this transition, but we realised that the ones left behind were our seniors. While we were busy building social connections digitally, our seniors are still struggling to catch up with our digital pace and socialise with us.

Anecdotes
from
our
Students

66 *They want to belong, they want to learn, they want a piece of our time and they are also willing to change their lifestyles.*

They just need a little bit of our help and support. 99

"I like spending time with my grandparents. Years after retirement they are often lonely and lose touch with friends and family members. Not having anyone whom they can spend time with makes it worse. I believe digital literacy will help them in staying in touch with their loved ones and motivate each other to be happy."

Dolly Rawat, FY BA

"I've observed that even smartest of the aged people tend to struggle with making use of the most basic of modern technology".

Sanjana Bajaj, FY BCOM

"I know for a fact that being able to use even basic WhatsApp makes my grandma happy. This makes her feel that she is a part of the fast technology oriented lifestyle and that she can send me WhatsApp texts daily."

Smriti, SY BCOM

Socialising is not the only issue concerning the elders. With fast growing technology, the banks have started extending their financial services online which has smoothened the banking experience. Due to the lack of digital literacy the seniors have not been able to exploit this advantage of accessibility to banking services provided through digita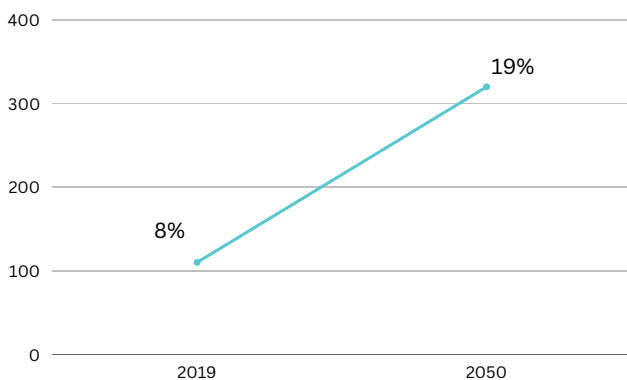lisation. Our seniors are mostly people who have retired and have lifetime savings in their bank accounts. They are a vulnerable group targeted by cyber criminals. This increases their fear of becoming a victim of cyber fraud.

These observations highlighted the severity of the issue and we decided to carry out extensive secondary research on the state of digital literacy among senior citizens in India. Our observations:

The World Health Organization (WHO) has described this multifaceted social phenomenon as ageism:

Ageism is Real!

"the stereotypes (how we think), prejudice (how we feel) and discrimination (how we act) directed towards others or oneself based on age"

In the year 2050,

one in every five Indian will be a senior citizen

Decade of healthy ageing

Declared by UN

2020   2030

The Indian Government is running schemes, under the aegis of the Ministry of Social Justice and Empowerment.

The Ministry of Social Justice and Empowerment has projected that the Indian Elder population will grow from 110 million to 320 million, which as a percentage of population is 8% to 19%.

This information gave us an idea on how huge the issue actually is and how extensively the Indian Government has been working on it.

This drove us to contemplate on conducting awareness and training drives and building a safe and trustworthy environment for our elders.

With the possibility of helping our seniors be digitally literate, we reached out to the Founder of Symbiosis, Dr. S. B. Mujumdar.

In our meeting with the Principal Dr. Hrishikesh Soman, he talked about the knowledge repository that the senior citizens have and with the available digital technologies, how best we can capture this knowledge.

This bolstered our enthusiasm to conduct primary research to understand digital literacy among seniors.

We decided to understand the extent of the problem at the ground level and to gauge first hand the need for digital literacy among seniors. We organised an event on digital literacy for the senior citizens in the SCAC campus.

The event was held on 29th March, 2023 at the Symbiosis College of Arts and Commerce, auditorium in offline and online mode.

"It's no longer about literacy, it's about digital literacy.
There are people who are quite literate and have retired from senior positions, but are not digitally savvy."

Dr. S. B. Mujumdar,
Founder of Symbiosis

Given the importance of Digital security in this age of Cyber Crimes, police officers from Pune Cyber Crime Branch were invited. PSI Mr. Chandrashekhar Sawant and Police Constable Mr. Anil Gajanan Pundalik helped raise awareness about cyber safety, the need to protect our personal data and the various ways in which online frauds are committed and ways to safeguard oneself.

The police personnel highlighted the importance of being prudent, sceptical and extremely careful when navigating the digital world. They cited various examples where senior citizens had lost their life's savings to online scams and frauds.

Key messages from Cyber Crime Department

Keenagers! Be alert when using your bank card for payments.
Ensure you get your own bank card back after making payments
All OTPs should'nt be shared, especially OTPs for banking transactions
The digital scam helpline number is 1930
Visit our website www.cybercrime.gov.in

PSI Chandrashekhar Sawant

PC Mr. Anil Pundalik

Be prudent, be sceptical, be alert while navigating the digital world!

The event provided a platform for Elder members of the community to come & share their digital journey. They also got a chance to hear from other seniors about how they had bridged the digital divide, providing other seniors comfort in the knowledge that "if they can do it, we can also do it". Seniors also got to expand their knowledge by engaging in conversation with other seniors & the student community.

Mr. Malik Mukhtar, father of our college student, joined us virtually via Google Meet all the way from Srinagar and interacted with us about his own experience using digital devices. In a candid conversation, he told how he relies heavily on his son to navigate the various applications and feels the need to operate and learn digital devices to be independent. He spoke to the audience, telling them how he used YouTube for learning new things and keeping himself entertained. He also spoke about how impressive it was to see money being transferred from one place to another in the shortest span imaginable and how it had brought immense ease and peace to his life.

Mr. Rajani Kant Pandey, former principal of an engineering college and grandfather of our student took to the stage to tell us how, the entire world is quite literally in the palm of our hands- because of mobile phones and digital devices. He dwelled on how the current form of technology is in stark contrast to his former days without any internet. He highlighted the comfort of being able to communicate digitally, order groceries online, listen to music as well as access healthcare - all while sitting in the comfort of his home.

The turnout for the event was truly overwhelming! We hosted around 70+ senior citizens along with 25 student volunteers and several members of the faculty. It was a lively atmosphere and we also witnessed participation from students across the college, some of whom could not be seated because of the packed venue.

This brought about awareness about the primary research being undertaken among the broader student community.

With this idea we embarked on a primary study to find the level of digital literacy amongst senior citizens in India.

RESEARCH OBJECTIVES

Main Objective of this Study

To understand the state of digital literacy among senior citizens, their financial literacy and the impact of digitalization on their social life, health and well-being.

Understanding the level of digital literacy will help us identify areas where seniors require technical upskilling and online support.

Understanding the level of financial literacy will enable us to provide solutions for better financial management, achieved by proper utilisation of internet banking, trading, etc.

Understanding the current loneliness, health problems and other social issues faced by seniors will help us find ways to socially engage our senior community online and help foster connections and relationships.

The primary data collected in this study will be used to understand the needs of our seniors and help build self-sustaining communities where their issues will be addressed and resolved with a spirit of collaboration and service.

Main areas

on which the study focussed

- Demographic details
- Access to internet & device ownership
- Understanding the current level of digital literacy
- Usage of digital devices for daily needs
- Health Conditions & mental well being
- Support required on their digital journey
- Gauging interest in being a part of future endeavours to promote digital literacy

The study was conducted **pan India** targeting the population in the **age group 60+**. As our Symbiosis student community comes from all over the country, it was convenient to conduct a survey amongst the elders in our immediate family/friends. This facilitated collection of data points from elders who felt safe sharing their information.

INDIA & GLOBAL

DEMOGRAPHIC TRENDS

KEY DEMOGRAPHIC FACTS & TRENDS

The global phenomenon of ageing is much faster now than ever. In 2020, the number of people aged 60 and above outnumbered children younger than 5 years. By the year 2050, the world's population aged 60 and above will double. This raises a pertinent question for countries world wide - how do we assist, protect and empower this vulnerable group?
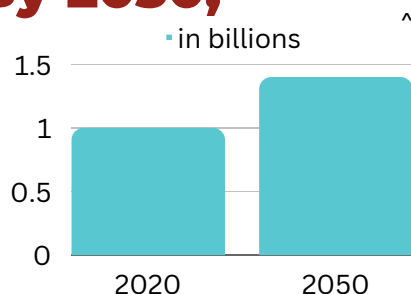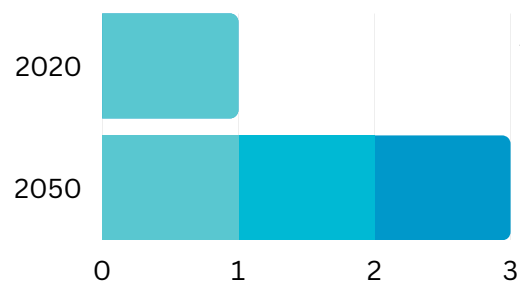
Source: ITU hub
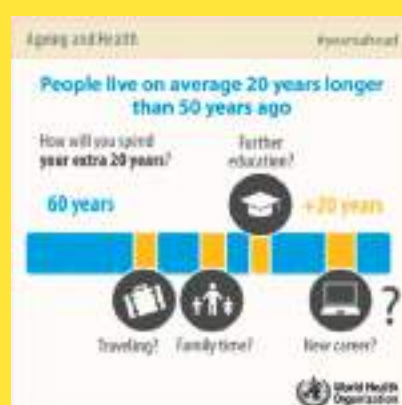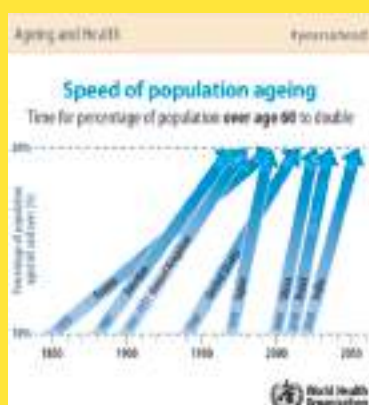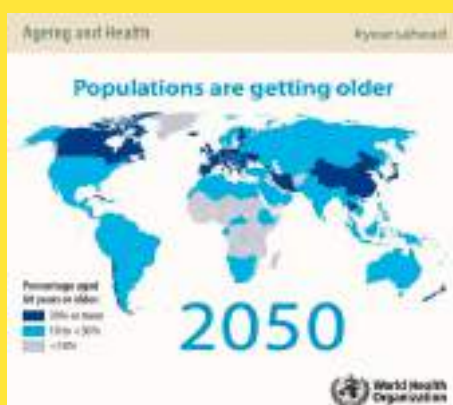
Globally By 2030,

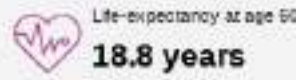1 in 6 people in the world will be aged 60 years or over

The population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion by 2050
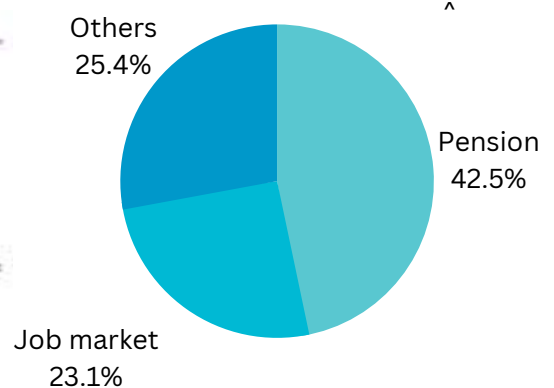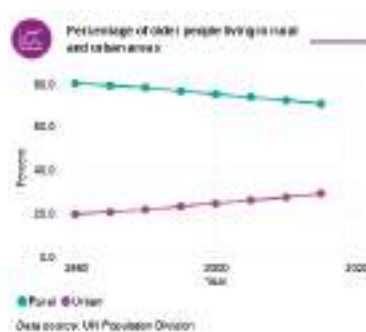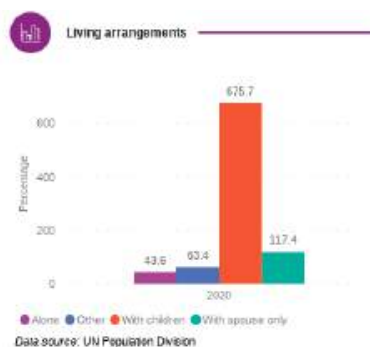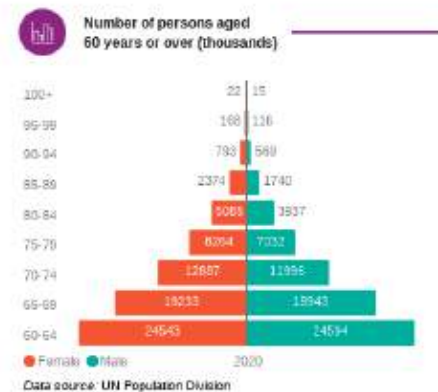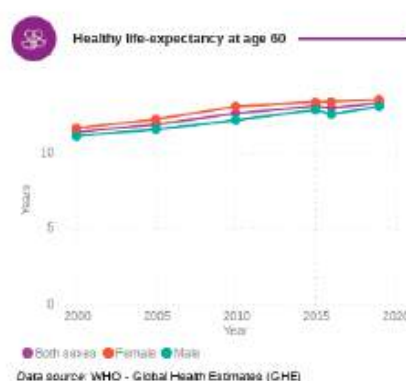
The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million

Demographics and life-expectancy

Aged 60 and above
10.7%

Aged 80 and above
1.1%

Life-expectancy at age 60
18.8 years

Healthy-life expectancy at age 60
13.2 years

Data source: WHO - Global Health Estimates (GHE) (2019), UN Population Division (2023)

In India, the statistical data follows similar trends. 10.7% of the total population is aged 60 and above, and the numbers are only rising. The life expectancy after the age of 60 is another 18.8 years - a clear indicator that modern medicine and facilities are now enabling people to live longer.

India's elderly are projected to become an even-larger share of the population.

Healthy life-expectancy at age 60

Data source: WHO - Global Health Estimates (GHE)

Number of persons aged 60 years or over (thousands)

Data source: UN Population Division

Living arrangements

Data source: UN Population Division

Percentage of older people living in rural and urban areas

Data source: UN Population Division

Others
25.4%

Pension
42.5%

Job market
23.1%

A small percentage of the senior citizen population in India live alone (4.9%), while the majority of the elderly population live with their children (71%)

42.5% of senior citizens in India receive pensions and 23.1% are still active in the job market

70.8% of the older population reside in rural India, with 29.2% being urban dwellers. (2015 data)

Source:WHO Data Platform

Ageing, although a natural phenomenon, comes with its own set of challenges, like decline in physical health, reducing social circles and increased feelings of loneliness, anxiety and stress. Changing sleep patterns and appetite, lack of interest in daily activities and general downfall of physical and mental health.

The challenges faced by senior citizens are twofold. As mentioned above they face health related issues that only aggravate with age. Most senior citizens experience hearing loss, blindness or vision impairment, lower back pain and falls. The data shows an upward trend in these health conditions, with 100% blindness and vision impairment being recorded for age groups 90+. On the other hand, they also experience age-related discrimination by society: data from 2014 recorded a crude prevalence of ageist attitude towards senior citizens at a whopping 79.5%.

AGEISM

Ageism - discrimination and stereotyping on the basis of age. One experiences it when anyone assumes they're "too old" for something, instead of finding out who they are and what they're capable of.

All prejudices are based on the idea of othering someone. Other race, other gender, other nationality. The strange thing about ageism, that other is us. Ageism is prejudice against our own future selves.

Ageism feeds on denial. Our reluctance to accept that we are, one day we are going to become that older person. It manifests itself when we believe in anti-aging products, or when we feel our bodies are betraying us simply because they are changing.

In the work force- age discrimination is rampant. The personal and economic consequences are devastating. Not one stereotype about older persons in the workplace holds up under scrutiny. We know that companies that have diversity in manpower aren't just better places to work- they work better. And just like race and gender, age is a criteria for diversity too.

Longevity is a fundamental hallmark of human progress. By the year 2050, one in 5 of us will be over age 60. All these older people represent a vast, unprecedented and untapped market and yet capitalism and urbanisation have propelled age bias into every corner of the globe.

HEALTHY AGEING

The World Health Organization

defines healthy ageing as "the process of developing and maintaining the functional ability that enables well-being in older age."

Healthy ageing refers to maintaining good health and functioning. As one grows older this includes a person's ability to:
· meet his/her basic needs;
· learn, grow and make decisions;
· maintain mobility;
· build and maintain relationships; and
· contribute to society.

In recent years, there has been an increasing focus on healthy ageing as the world's population ages. The growing aged population faces unique challenges of their own - in workplaces, they face discrimination and alienation. They are not offered opportunities that they are capable of performing and are almost always kept out of the workforce after the age of 60. Daily ordinary activities like getting groceries, health check up and conveyance require extra effort or assistance, which is not always readily available.

The United Nations' Decade of Healthy Ageing (2021–2030) is a global collaboration, aligned with the last ten years of the Sustainable Development Goals, to improve the lives of older people, their families, and the communities in which they live. This highlights how we have a global need to encourage digital literacy among senior citizens so that they can lead confident and independent lives in today's fast paced environment.

Their needs may differ according to their circumstances, but the fact remains - senior citizens are a vulnerable group that must be protected and empowered.

EXPLORING
THE
DIGITAL LANDSCAPE

Internet Access and Use

The Internet and new technologies may represent a chance for social inclusion, empowerment, and improvement of the quality in the lives of many citizens. However, demographic and sociocultural differences often push senior citizens toward social and digital exclusion.

TYPES OF INTERNET USERS

Social Media Users | Digital Natives | Content Creators

*

Internet Use in India in 2023

- There were 692.0 million internet users in India in January 2023.
- India's internet penetration rate stood at 48.7 percent of the total population at the start of 2023.
- Out of the 692 million active internet users in India, 351 million were from rural India and 341 from urban Indian. The report estimates that there will be 900 million internet users in India by 2025.
- The charts show the purpose of internet access and the devices used to access internet by Indian internet users.

- A large fraction of Indian households are connected to the internet. This is due to the cheaper data plans and increased availability of smartphones which have helped people get access to services online. This has led to an increase in online shopping, social media usage, e-commerce, and other digital activities which have improved India's economy as well as society at large.
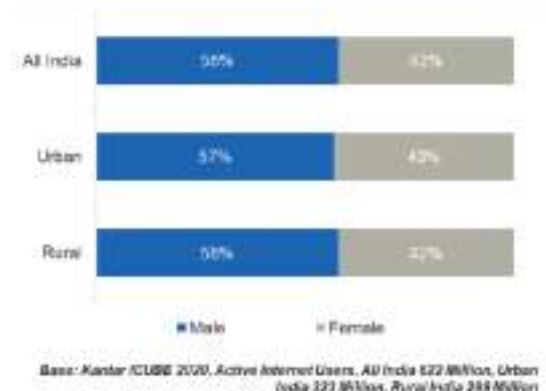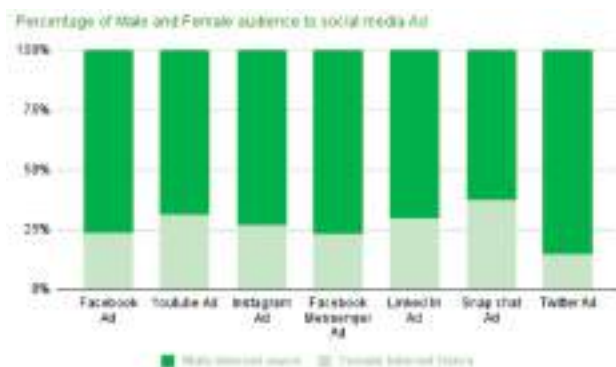
The Gender Digital Divide

The Gender Digital Divide refers to women and girls lacking access to, use and development of information communication technologies (ICTs). Social norms refer to responsibilities, roles and behaviours associated with being a man or a woman.
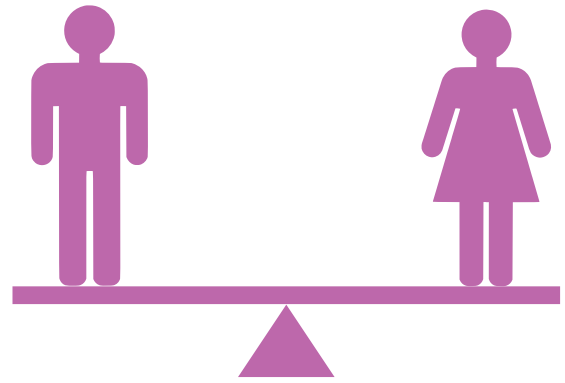
Data on the use of the internet in India indicates that in comparison with 58% male internet users, female users are only 42% (ICUBE 2020). Data for first-time users of the internet shows a stark contrast between men who have used the internet at 57.1% compared with women at 33.3%.

According to the "Digital 2023: India" report, 67.5% of India's total Internet users used at least one social media platform. Of these social media users, 26.5% were female and 73.5% were male. The chart below shows the percentage of male and female audience exposed to Social Media Platform Ads.

Base: Kantar ICUBE 2020, Active Internet Users, All India 622 Million, Urban India 323 Million, Rural India 299 Million

The Age Digital Divide

The digital divide is particularly pronounced when it refers to citizens 60 years of age or older. In fact, increased age is often associated with decreased levels of Internet access, limited use of digital devices, and patterns of digital connection. The graph from the "Digital and Social Media Landscape in India" shows the age distribution in Internet users in 2019. Out of 290 million social media users, 52.3% were Millennials, 28.4% were Gen Z, and 15.1% were in the age 35-44.
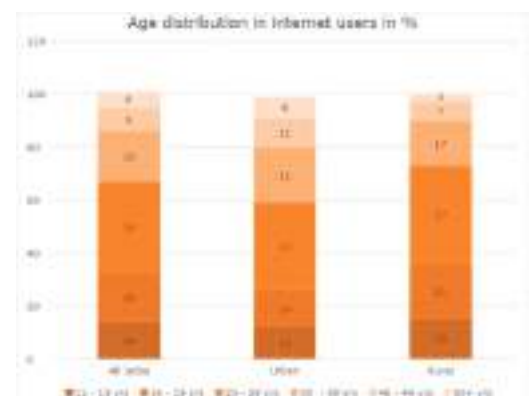
Mobile connections in India in 2023

GSM Association is a non-profit industry organization. It is a definitive source of mobile industry insights, forecasts and research, used around the world.

Data from GSMA Intelligence shows that there were 1.10 billion cellular mobile connections in India at the start of 2023. However, note that many people around the world make use of more than one mobile connection. For example, they might have one connection for personal use, and another one for work – so it's not unusual for mobile connection figures to significantly exceed figures for total population. GSMA Intelligence's numbers indicate that mobile connections in India were equivalent to 77.0 percent of the total population in January 2023.

According to the report, there had been a significant surge in the usage of online banking and digital payments in India, with a remarkable growth rate of 43. In addition, the category of Digital News has also witnessed a growth of 20% over the last year, as almost one out of five Indians now consume news through digital channels. Nevertheless, there remains a vast untapped market for Digital News, indicating ample room for growth in the future.
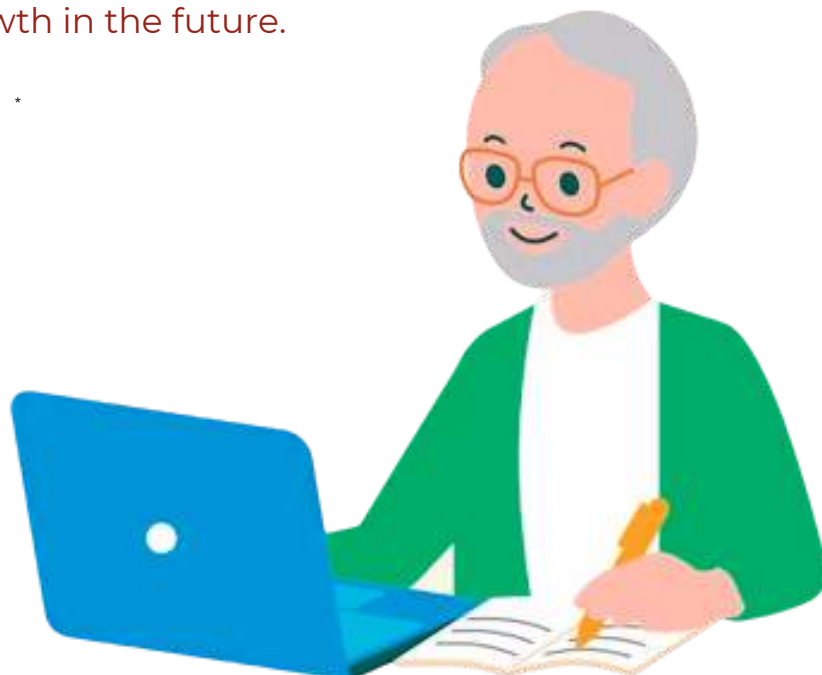
LEVERAGING TECHNOLOGY FOR AGEING WELL

Ageing is a privilege, and ageing in a digital world is an opportunity. The internet and the ageing of our population are the two major dynamics of our time. The former is evolving into a tool to address the latter and a way to create a society that is age-friendly. It has evolved into a means of enhancing their sense of well-being, satisfaction, and mental and physical health.

Age Friendly Environment

Age friendly environments involve settings that boost older people's engagement, health, and well-being. They improve health and postpone or prevent the start of diseases and functional decline.

Many barriers exist in the lives of older adult's, including health, transport, housing, isolation, disability and access to technology. The appropriate integration of technology within age-friendly communities continues to offer possible solutions to these barriers and challenges. A smart, age-friendly environment enables wellbeing and social inclusion of older adults, safe mobility. Residents living in smart environments use Information and Communications Technologies (ICTs) for monitoring of their daily activities, functional capacities and provision of health care services.

Social Connectivity

Social connection is important among all age groups and not just the aged and is very crucial. It emphasizes the significance of human connections and the feeling of belonging, the safety and the security that accompanies such deep and valued interpersonal relationships. Communication and social connectedness are the primary blocks that go a long way in building and sustaining relationships and making contributions to society in ways that are truly consequential.

Technology Usage for Ageing Well

Pre Covid

In India, the digital literacy among senior citizens before the Covid-19 pandemic was very low. While some seniors were tech-savvy, many others required a lot of attention in this regard. One of the biggest factors on which this depended, was the level of education, income and location of the senior.
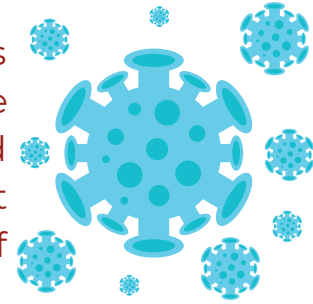
Digital India Initiative

The government of India's **'Digital India Initiative'** aimed to transform the whole of India, into a digital India, which included digital literacy among senior citizens.

In addition to all of this, some NGOs and private organisations are also lending a helping hand for this cause. The Senior Citizens Bureau of India had launched programs to train seniors on how to use smartphones and the internet.

Despite all of these efforts, digital literacy in India has remained a cause for concern. The Covid-19 pandemic has helped to further highlight this issue and come up with solutions for the same. The shift of government services and healthcare facilities to online digital mode has served as the solution to digital literacy which has forced the seniors to adapt positively to technology changes.

Post Covid

The mindset of elders has evolved and changed in a way that even they are beginning to see the magic and wonders of technology. This happened during the time of quarantine, when people from all over the world were locked in their houses. Technology made quarantine so much easier and fun, from watching YouTube videos and baking to ordering groceries and being able to talk to family and friends. This is the magic of technology, which everyone witnessed and understood.

Till before the pandemic, everyone believed that digital literacy is at par with basic literacy, but with the Covid-19 pandemic and everything going online and virtual, we believe that digital literacy requires inclusion in our lives. With the virtual reality that Covid has given us, it has become extremely crucial to consider that the whole world will revolve only on digital hands.

Having said that, digital literacy among the seniors of our community, has also been shaped into a reality and we see a lot of technology adoption by them at this pandemic phase. Elder's who were earlier apprehensive of using technology with the fear of frauds and scams are now getting comfortable with it.

Senior citizens are keener to learn and use technology. It gives them a chance to connect with their families living away from them. It builds a bridge for this generational gap. Covid - 19 was therefore an opportunity for our seniors be a part of this digitally advanced India.

When the Covid-19 pandemic hit, the whole world came to a standstill.
The whole concept of 'social distancing' and staying at home, has brought us to the point of having to adapt to the new-normal and continue our lives per se.
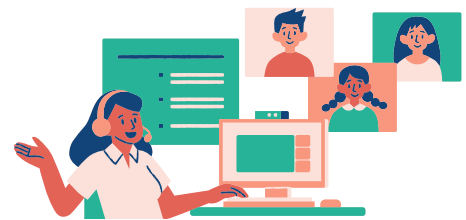
But one thing that wasn't affected by the pandemic was surely technology. It still reached masses just as it did Pre-Covid. The lockdown in India served as a catalyst for communication technologies. To work, to access services or to be a part of leisure activities, communication technologies were the only medium by which this was possible.
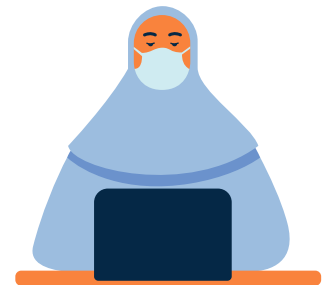
The Online Health Care System

The online health care system has also grown exponentially due to the increased use of the internet and technology.

Telemedicine, caregiving services, and medical consultation come under the umbrella of E-commerce and healthcare in our country. Online E-commerce platforms selling elderly medical products are an example of E-commerce innovation.
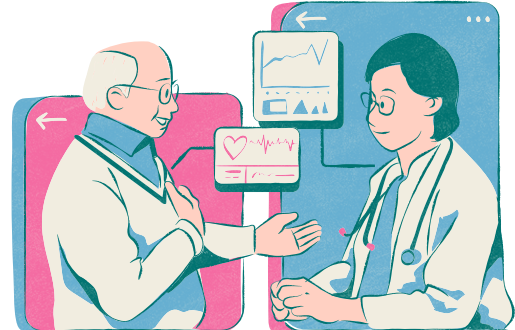
Digital Inclusion

It is defined as "equitable, meaningful, and safe access to use, lead, and design digital technologies, services, and associated opportunities for everyone, everywhere". This has been considered a very useful approach that seeks to understand the importance of ensuring that the senior citizens not only gain the access to information and communication technologies but also know how to use them. Digital inclusion of senior citizens refers to the process of ensuring that older adults have access to and the ability to use digital technologies such as computers, smartphones, and the internet. The process of bridging the technological gap between generations is known as Digital Inclusion. This implies people are free from any barriers restricting them to enhance their knowledge using information and communication technology.

Barriers To Technology Adoption

The most common and serious barrier to technology in senior citizens is the **health barrier**. Older people may experience age related physical and cognitive decline, fear of the internet, limited access to technology, and lack of relevance.

Fear of security and privacy issues, limited access to technology, and lack of relevance make it difficult for older people to adopt technology. Additionally, they may not see the need for social media, online shopping, messaging apps, Google maps, or voice driven technologies like Apple-siri, Google-Alexa, and so on.
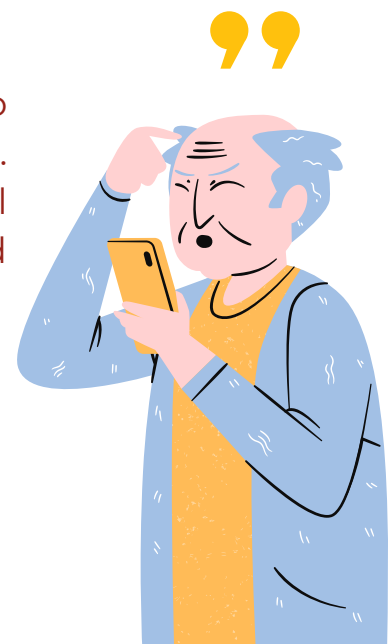
66 Enablers and Barriers to Technology

Factors such as familiarity with technology, perceived usefulness, ease of use, social influence, and access to support can enable technology adoption, while age-related physical and cognitive decline, fear and anxiety, cost, limited access to technology, and lack of relevance can obstruct it. By knowing these factors, technology developers and policymakers can work to develop technologies and programs that can meet the needs of older persons and enable greater technology adoption.
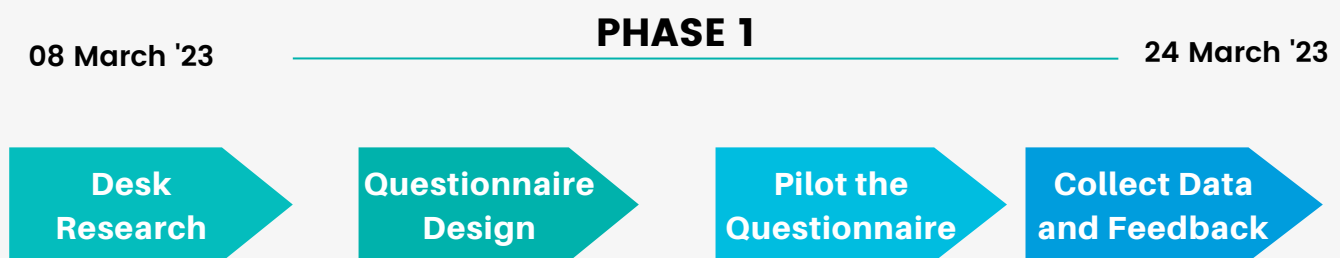

Enablers

ease of use

perceived usefulness

social influence

familiarity with technology

access to support

age-related physical and cognitive decline

lack of relevance

fear and anxiety

cost

limited access to technology

Barriers
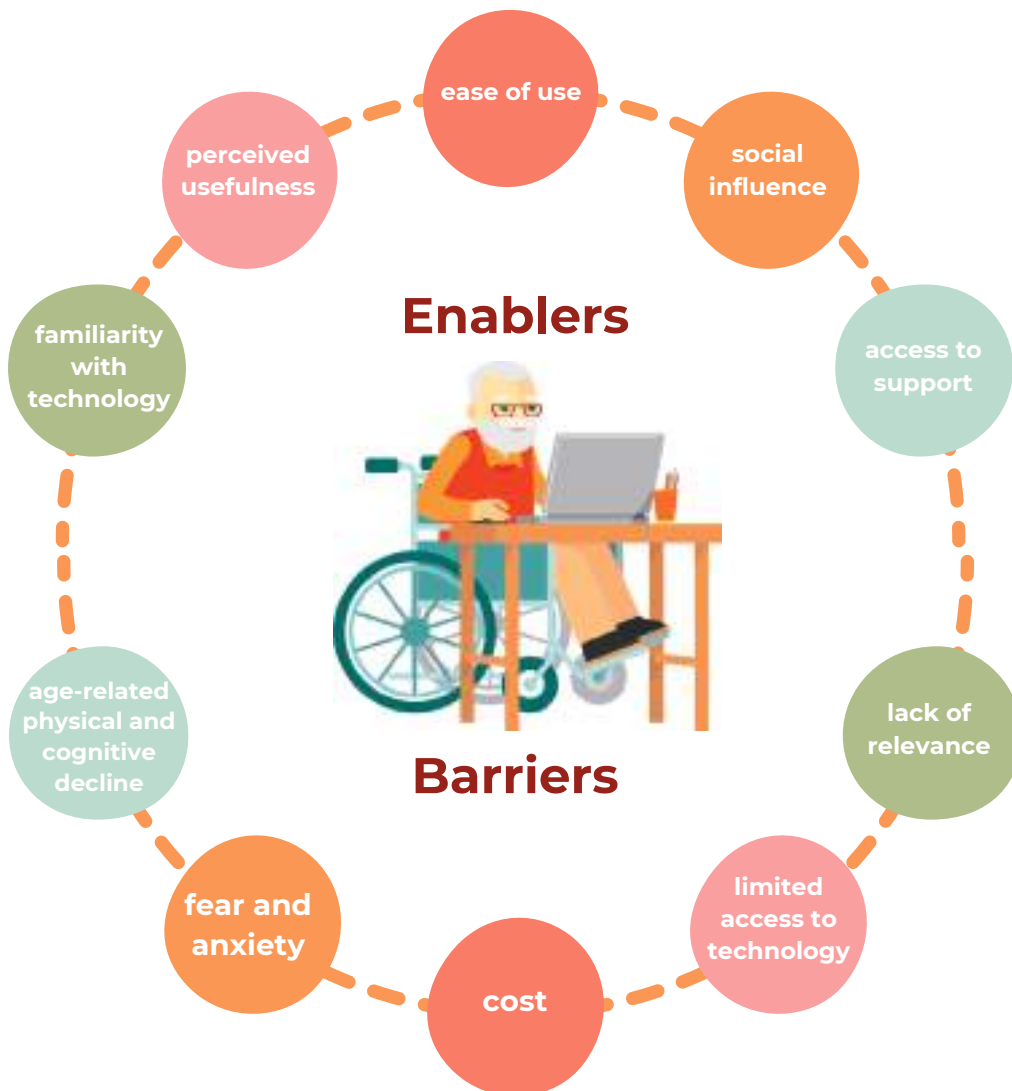
RESEARCH METHODOLOGY AND DATA COLLECTION

Our Research Methodology consisted of primary research which included drawing the questionnaire, piloting it and then rolling it out to the larger audience for their response.

Our desk research helped us identify key-areas surrounding digital literacy, health and wellness and financial usage among senior citizens. The kick-off meeting for the Research project was on 8th March, 2023. Our Mentor, Mr. Rajeev Goel outlined the objectives of the primary research being undertaken, goals for the team and walked us through the expectations and outcomes for the report.

PHASE 1

08 March '23 ———————————————— 24 March '23

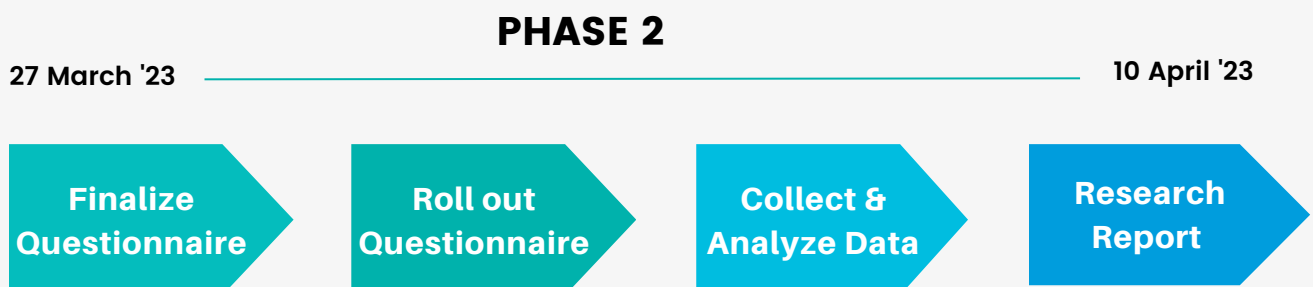| Desk Research | Questionnaire Design | Pilot the Questionnaire | Collect Data and Feedback |

Following this, a Google form was circulated to inform the student community at SCAC about the research. Responses were invited from interested students to act as volunteers. We received an overwhelming response from the student community which cut across various departments and disciplines. Students from the Arts stream, Commerce stream and Masters programme pitched in to contribute towards this endeavor.

The initial part focussed on two main activities, developing a questionnaire to collect primary data from Senior Citizen on digital literacy via Google forms and desk research to understand more about the research topic from secondary sources like publications from government sources, newspapers, journals & international organizations. The student volunteers divided themselves into these two broad categories and worked on the same.

The pilot Google form was prepared and shared with college professors and student volunteers for their feedback and suggestions. The form was further tweaked to incorporate all inputs and the final questionnaire was released on 31st March, 2023.

The Google forms questionnaire was prepared with the intention of understanding the level of Digital Literacy among Senior Citizens. It also aimed to understand the challenges faced by them while operating their devices, their needs and expectations from the digital world, the unique assistance and guidance they might require while acquiring digital training, their health, attitude and other demographic indicators.

PHASE 2

27 March '23 ———————————————————— 10 April '23

| Finalize Questionnaire | Roll out Questionnaire | Collect & Analyze Data | Research Report |

The form also features a section on their social life, daily activities, as well as their emotional index like loneliness and other issues. The aim to acquire this knowledge is to find a correlation between their social life and digital literacy to find how we could build communities that help build wholesome platforms - for digital learning, growth and socializing.

The responses collected in a matter of just one week exceeded 450 responses and were truly impressive and made for a sufficient Pan-Indian pool of responses that were easy to comprehend and analyse.

The areas identified for study and analyse were

Digital Literacy

The main aim of collecting first hand responses from the senior citizen community was to understand their device usage patterns, needs and expectations as well as their current level of digital literacy.

We wished to identify the current level of their digital literacy in order to find ways to scale it further and help elders lead independent and dignified lives.
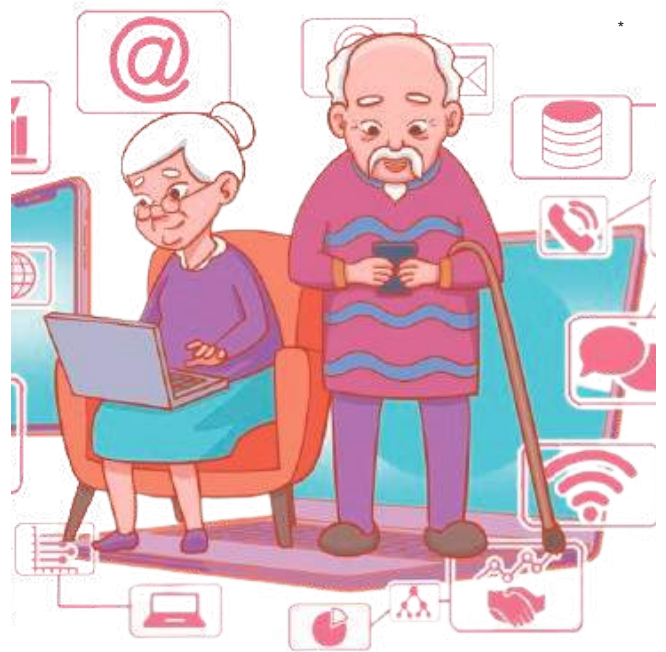
Digital Financial Usage

As sources of income dry up, senior citizens must rely on their savings or pensions their expenditure. This advocated for the need for better financial management which can be achieved via better financial literacy. It is our belief that as banking, trading, and investing services shift to online platforms, senior citizens must also embark on learning and understanding these online operations to manage their finances in a better and independent manner.

Health and Wellness

Loneliness is a growing epidemic and plagues all sections of society including the elderly. Senior Citizens who have retired may feel lonely because of their shrinking friend group and this feeling is only compounded with their children migrating to other states and countries for education or work.

Senior citizens may also experience physical and mental ailments that pose challenges to their day-to-day activities. Diabetes (type II) is a leading lifestyle disease among senior citizens caused due to inactivity and unhealthy lifestyle choices. Technology can be a great medium to rejuvenate through online yoga sessions and fostering a community feeling to do away with loneliness/ depression and an active environment.

Community housing

Another area we wished to explore was the scale and acceptance of community housing among senior citizens. We believe that the viability of this option is dependent on the affordability and perception surrounding such schemes.

Community housing is the need of the hour. As the proportion of seniors touches more than 20% of India's population, they would need a community which is safe, integrated with medical facilities, and with recreation facilities. As a part of our desk research we found that a lot of senior citizen housing communities are coming up in the country and these have a lot of amenities and facilities for elders.

Survey Response Collection

Jammu & Kashmir, 19

Himachal Pradesh, 1

Uttarakhand, 1

Punjab, 3

Uttar Pradesh, 17

Haryana, 2

Bihar, 2

Assam, 3

Rajasthan, 10

Nagaland, 1

Gujarat, 5

West Bengal, 11

Jharkhand, 1

Odisha, 15

Maharashtra 301

Madhya Pradesh, 20

Karnataka, 3

Chattisgarh, 4

Telangana, 5

Kerala, 14

Tamil Nadu, 12

Free to use Images from Google

Our students left no stone unturned as they went around collecting responses all across India from their geo-diverse communities, friends and families.

MAJOR
FINDINGS

Digital Literacy

82%

SENIORS ARE USERS OF DIGITAL DEVICES

OF THESE

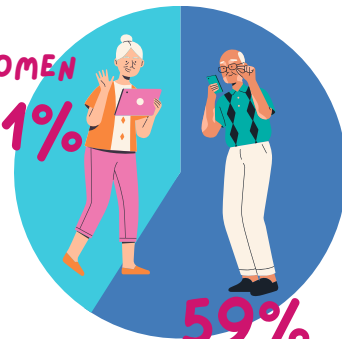**58% EARLY ADOPTERS (5+ YEARS),**
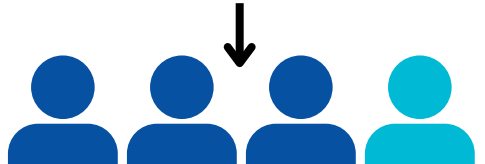
75%
Are graduate and Post Graduate degree holders
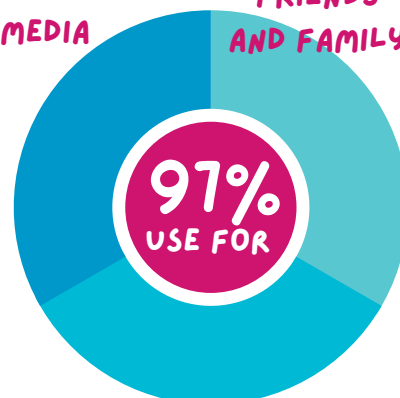
25%
school level education

WOMEN
41%

59%
MEN

60%
Of users are unaware about data mining 'cookies'

29%
respondents are aware and conscious tech users

SOCIAL MEDIA

FRIENDS AND FAMILY

97%
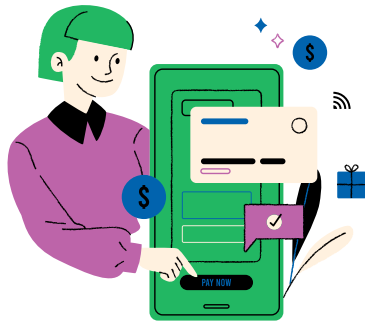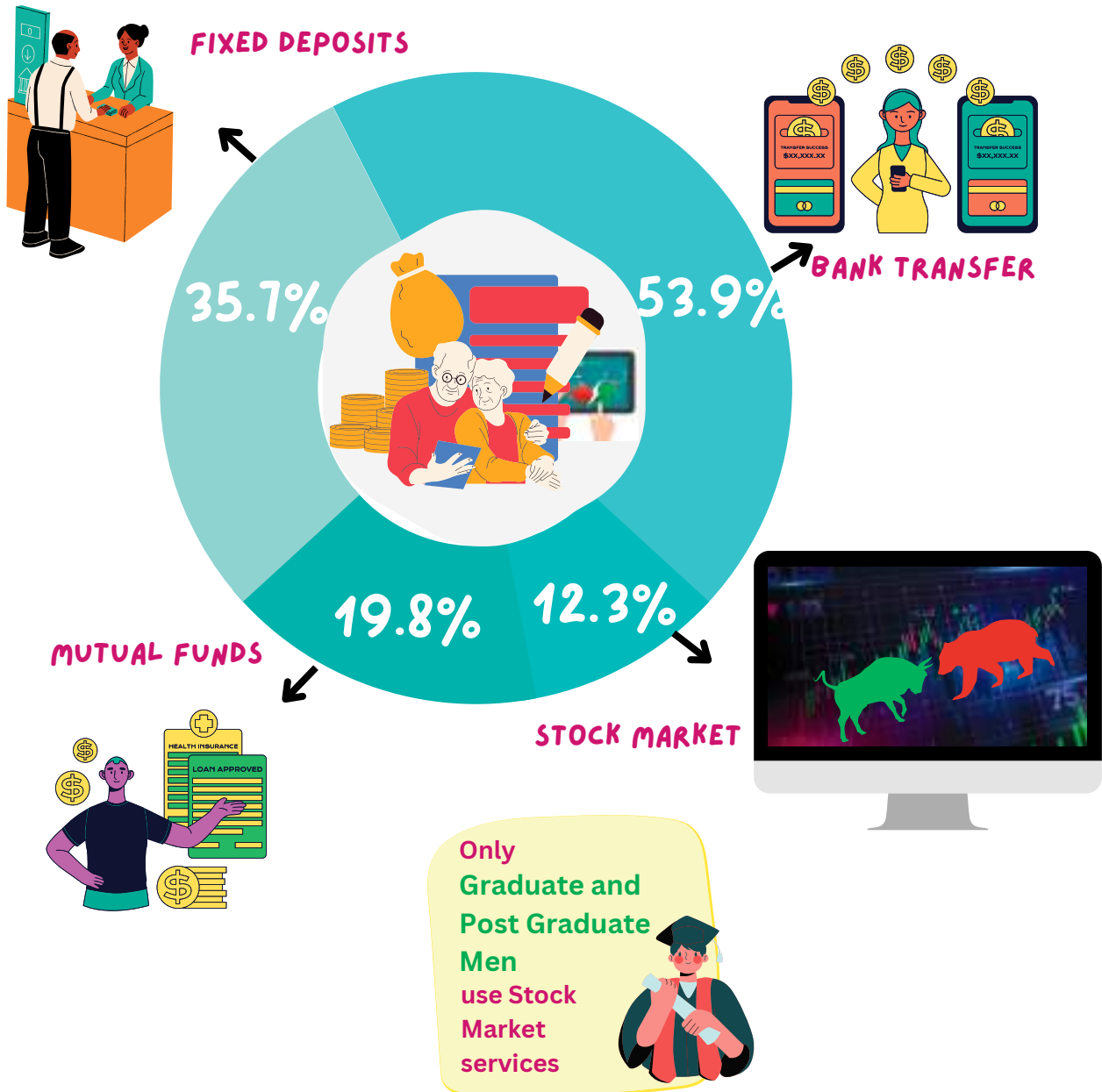USE FOR

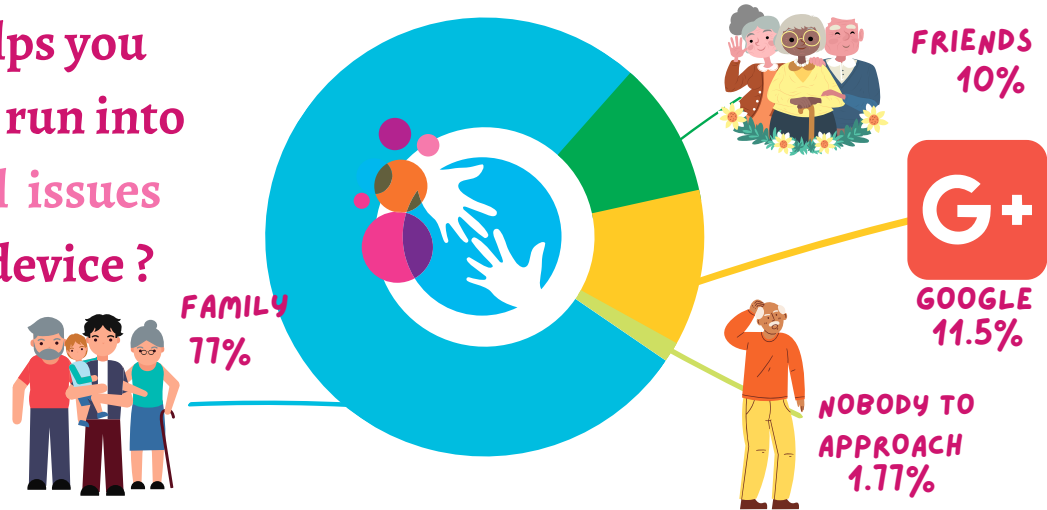ENTERTAINMENT

Digital Financial Literacy

Digital use of bank services and payments have gained huge traction in India. Especially after the Covid-19 lockdown, a cashless economy is the only way forward. With this in mind, it becomes imperative to understand the level of digital financial literacy among senior citizens.
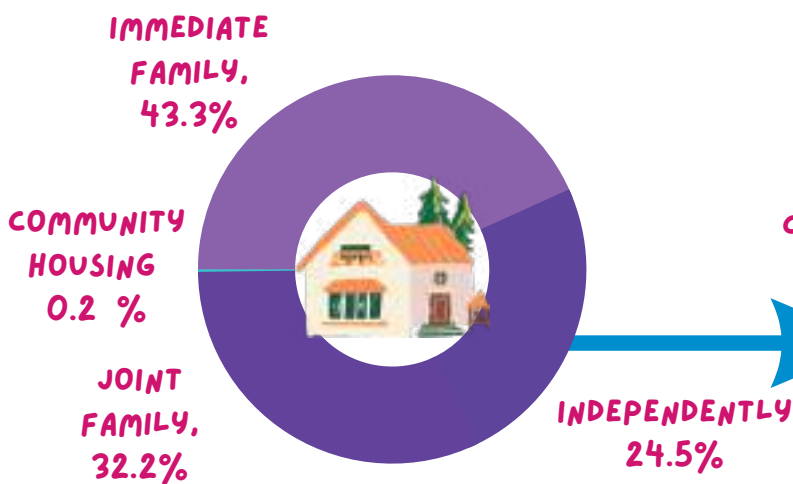
Financial Services Used

FIXED DEPOSITS

35.7%

BANK TRANSFER

53.9%

MUTUAL FUNDS

19.8%

12.3%

STOCK MARKET

Only **Graduate and Post Graduate Men** use Stock Market services

Digital Technology & Device Assistance

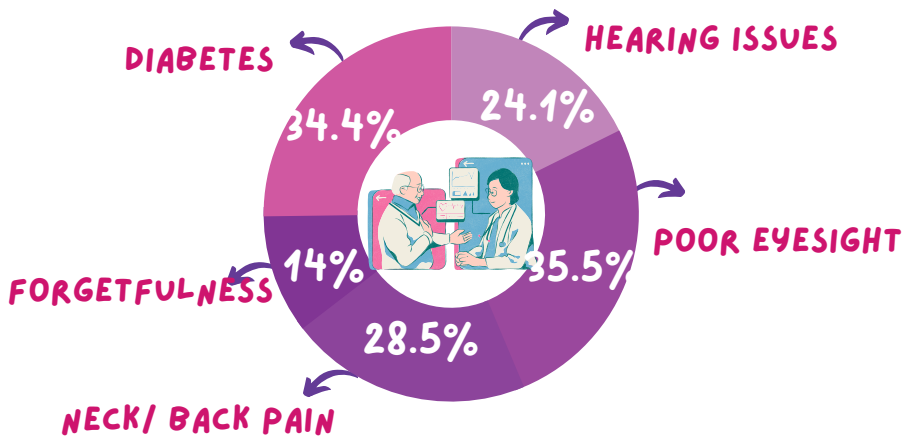**Who** helps you when you run into technical issues on your device ?

FRIENDS 10%

GOOGLE 11.5%

FAMILY 77%

NOBODY TO APPROACH 1.77%

74%

Seniors would wait patiently when they needed help

Living Arrangements

IMMEDIATE FAMILY, 43.3%

COMMUNITY HOUSING 0.2 %

JOINT FAMILY, 32.2%

INDEPENDENTLY 24.5%

Services used by seniors living independently

CAB SERVICES

GROCERY / ALARM SERVICES

GOOGLE MAPS

Health and Wellness

Age Related

- DIABETES **34.4%**
- HEARING ISSUES **24.1%**
- POOR EYESIGHT **35.5%**
- NECK/ BACK PAIN **28.5%**
- FORGETFULNESS **14%**

Emotional Aspects

- SLEEPING DISORDER **46%**
- LACK OF INTEREST **32.5%**
- EATING DISORDER **23.9%**
- FATIGUE **53.2%**
- LACK OF CONCENTRATION **18.1%**
- SAD ANGRY **24.1%**
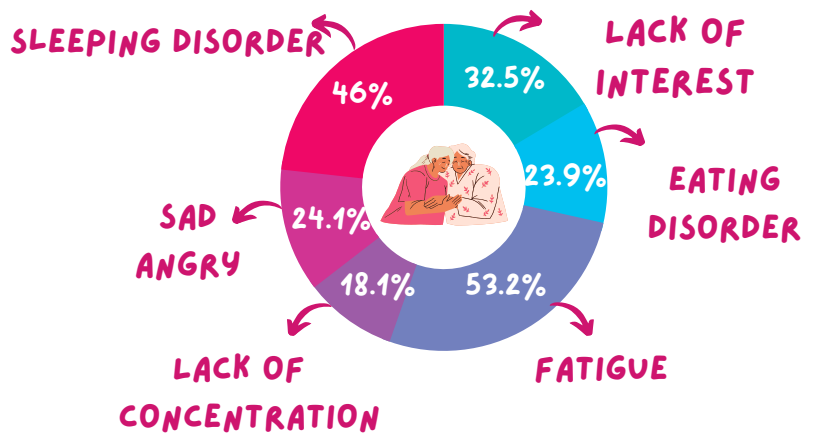
2 out of every 3 seniors responded that they felt lonely at some point in time

Reasons for Loneliness

- POST RETIREMENT, LIMITED FRIEND GROUP **14.5 %**
- CHILDREN HAVE MOVED OUT **25.7 %**
- NO ONE OF THE SAME AGE GROUP AROUND **20 %**
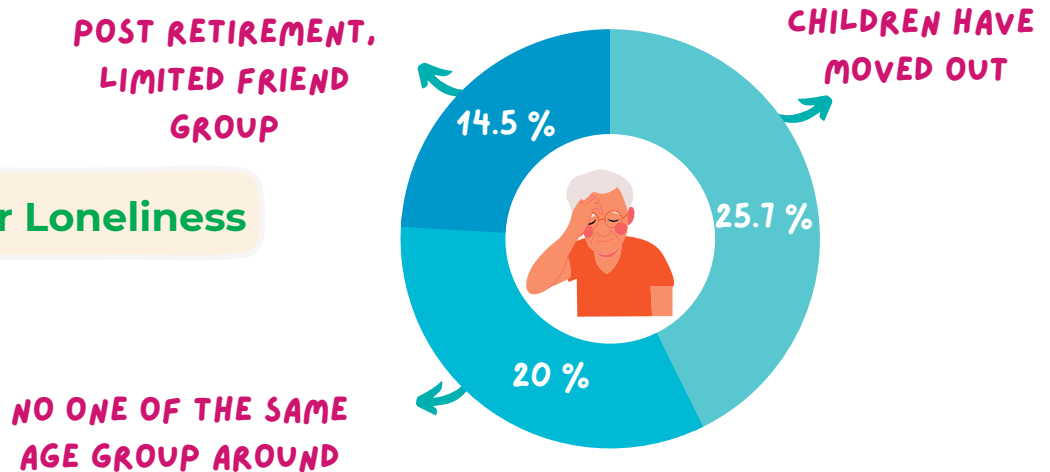
Digital Experience

3/5 seniors feel Independent when they use Digital Devices

1/3 seniors feel Relevevant when they use Digital Devices

Keenness to learn

69%

Expressed interest and willingness in joining our digital literacy initiatives

60%

9%

Willing to learn new things through our initiatives

Willing to share experiences with other seniors on their Digital Journey

CONCLUSION

The digital evolution continues to pervade every aspect of our lives - bringing peace, ease of living and comfort. With the aim of sharing the benefits of the digital world with the senior citizens, certain recommendations are made -

Organising Digital Device Training Workshops

Our data found that while 82% senior citizens are using digital devices, very few elders have truly utilized these devices to their full potential. Most senior citizens use these devices as a secondary means to communicate with distant family and nothing more. The usage rates for digiservices like digipayments, cab booking etc continue to be low.

Proper Digital Device Training and orientation workshops can help elderly understand how to use these devices and services to help them in their daily necessities. Training elders on computer use, internet services, email etc can help them become independent and feel empowered.

Making services senior-citizen friendly

Senior Citizens face unique challenges that must be addressed and accommodated to enable and encourage senior citizens to use these devices and services.

Language - according to WHO (2015) data, most senior citizens are rural dwellers, which indicates a clear need for building features that allow choosing language according to senior citizens' linguistic preferences.

Loss of eyesight is another health-related challenge that can be noticed in the senior citizen community. Digi Service providers must create versions that allow senior citizen users to toggle with the font sizes in a way that the user interface is not disturbed. The service interface must also be lucid and easy to comprehend at a glance to eliminate confusion and prevent senior citizens from abandoning the service altogether.

Addressing concerns surrounding cyber security and data privacy

With the advancement of technology, there is a parallel advancement of cyber crimes, data theft and misinformation. Vulnerable groups including senior citizens are at a greater risk of falling prey to these anti-social practices and may find themselves at the receiving end of such crimes, frauds and thefts Measures must be taken to address concerns of senior citizens to reduce their scepticism of the online world while also making them aware of the potential threats and risks while navigating digital devices and services. This exercise can be undertaken by the police department of various states in collaboration with NGOs, governments and other institutes.

Building self sustaining communities
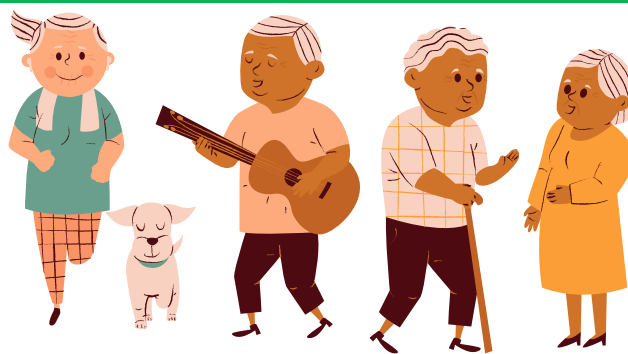
Ultimately, the goal of introducing digital devices in the lives of seniors is to make their day-to-day activities easy and hassle-free. Elders can, with the help of technology, build communities that foster peer-to-peer learning for digital devices as well as provide platforms for knowledge sharing.

For example - someone who is good at cooking can share recipes with a large community via zoom, book clubs and spiritual meetups can take place virtually; other needs- such as doctors consultations, ordering groceries, booking cabs can all be done by oneself, without the need to rely on another person's help, interest and time. Technology will truly help in building these self- sustaining communities.

Community housing is an optimistic endeavour, being built across various cities in the country. If the attitude towards these can be shifted, these housing societies are designed to specifically support the senior citizens and address their issues and challenges.

The Indian Govt. has taken a lot of initiatives for senior citizens under the Ministry of Social Justice & Empowerment. Our primary research gathered an overwhelming response from 450+ seniors. We want the Ministry to use the data and we will explore ways to work collaboratively and empower our senior citizens in the digital age.

Technology can help bridge the gaps identified in the digital, financial and wellness areas of the research. We feel that we can educate elders and create awareness through our SSIP channels and voluntary activities that we undertake to help out senior citizens. As a part of our plan to educate the senior citizens, we want to start reaching out to elders in our friends/family because they can rely on us and trust us. As we establish trust amongst the inner circle, we plan to subsequently take it to a larger population of senior citizens across the country.

We want to help our seniors by

Introducing the Digital services that would benefit them and Make them Digitally Literate

Introducing them to the world of Fintech and Helping them use financial services digitally

Helping them when they feel lonely and making them feel Independent
Taking care of their Digital Health and well being

Freepik.com

Lavale, Maharashtra, India
GPPM+88H, Lavale, Maharashtra 412115, India

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- Digital and Social Media Landscape in India- Acumen

ANNEXURE

Age
456 responses

- 60-70
- 70-80
- 80 above

36.4%
9%
54.6%

Gender
456 responses

- Male
- Female
- Other

44.1%
55.9%
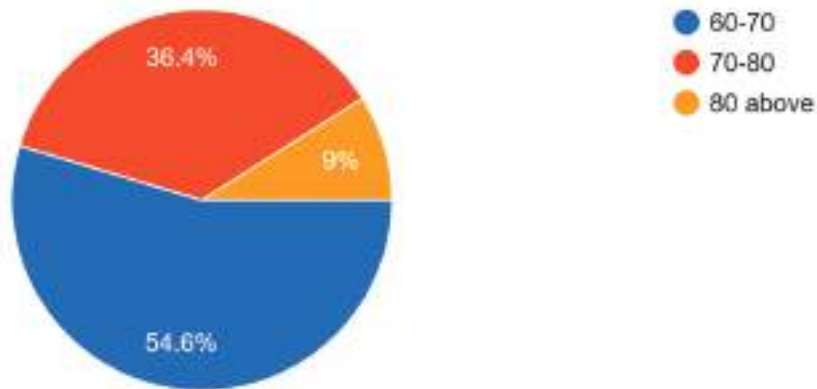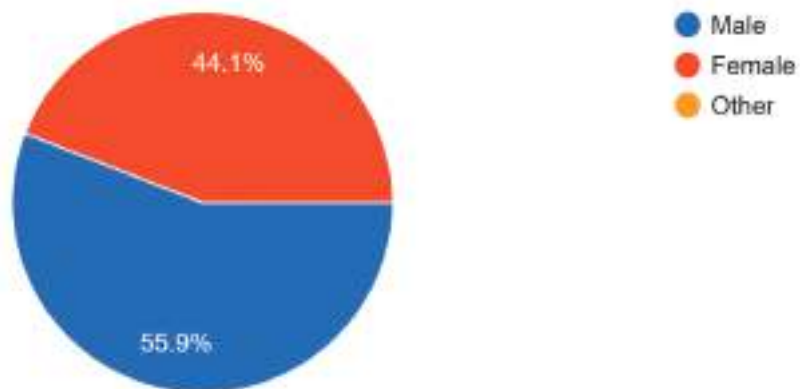
Income Source (Can choose multiple options)
456 responses

Savings — 151 (33.1%)
Self Income / Profession / Pension — 243 (53.3%)
Dependent on Family — 163 (35.7%)
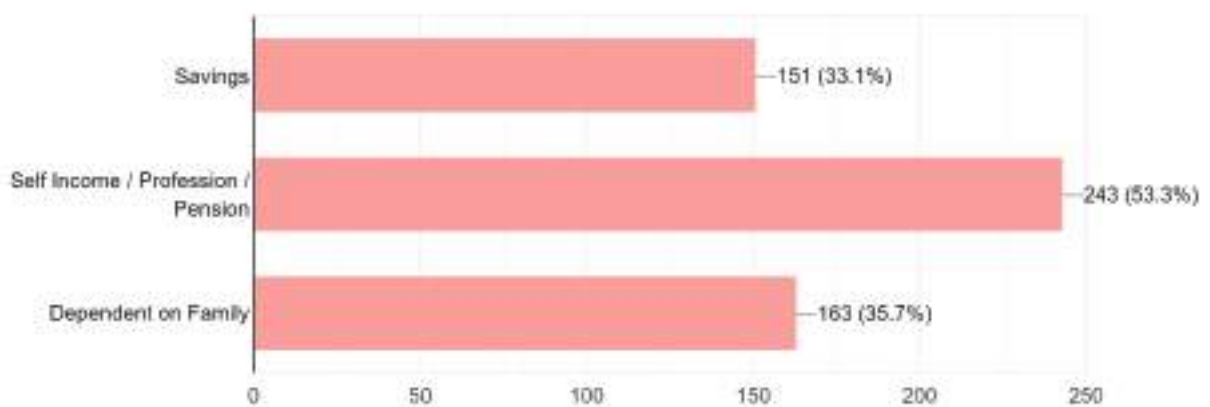
Annual Income Level

456 responses

- Less than 7 lacs
- Between 7 lacs to 15 lacs
- Above 15 lacs

27.2%

8.8%

64%
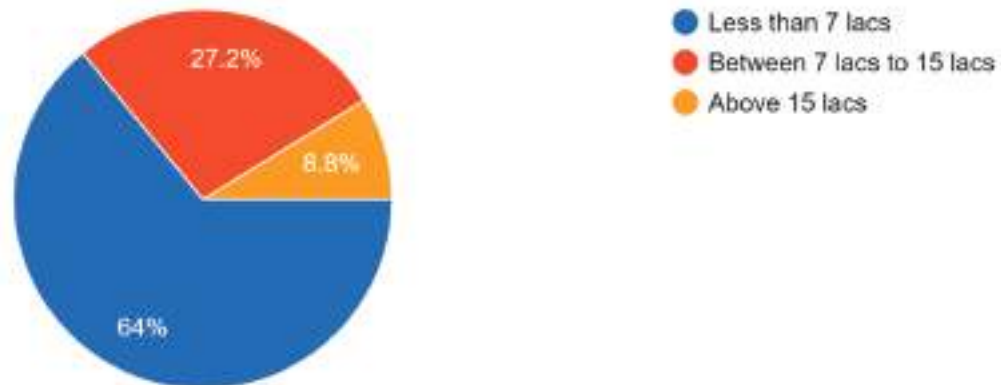
Education Level

456 responses

- School Level
- Graduation
- Post Graduation

36.6%

21.9%

41.4%
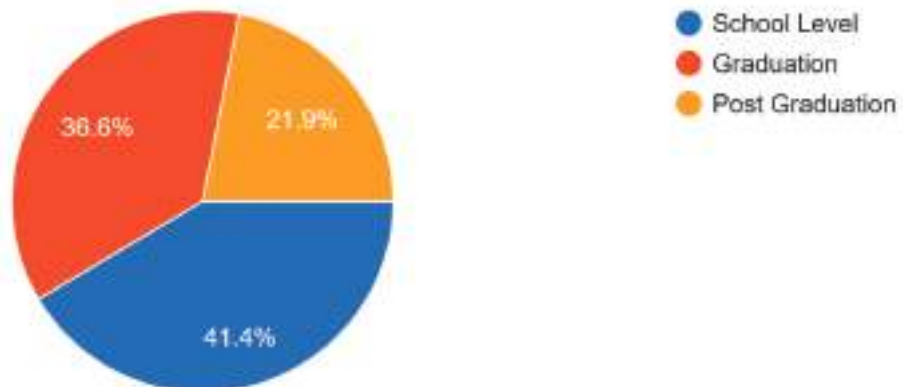
What is your present living arrangement?

456 responses

- Joint Family
- Immediate Family (with Children)
- Living Independently (Alone / with Spouse)
- Community Housing for Elders

24.8%

42.8%

32.2%
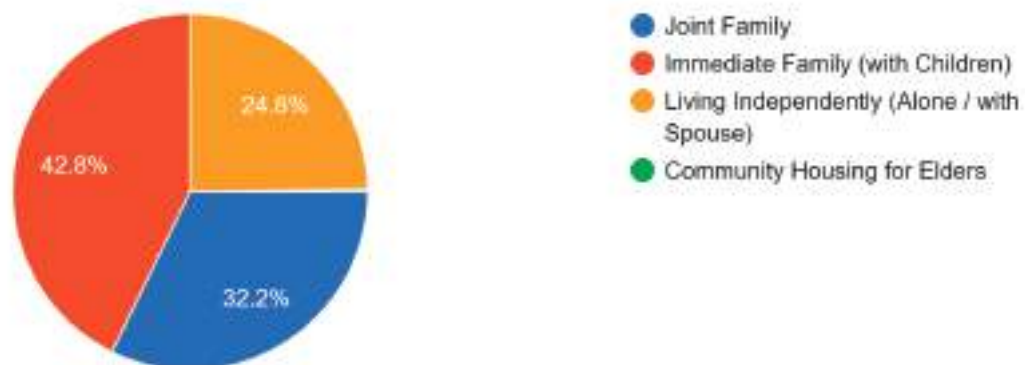
Do you face any of these Health-Related Issues? (Can choose multiple options)
456 responses

Hearing Issues — 110 (24.1%)
Poor Eyesight — 162 (35.5%)
Neck or Back Pain — 130 (28.5%)
Forgetfulness — 64 (14%)
Diabetes — 157 (34.4%)
Cancer / Chronic Disease — 14 (3.1%)
Specially Abled / Other Physica... — 17 (3.7%)
No Health Issues — 131 (28.7%)
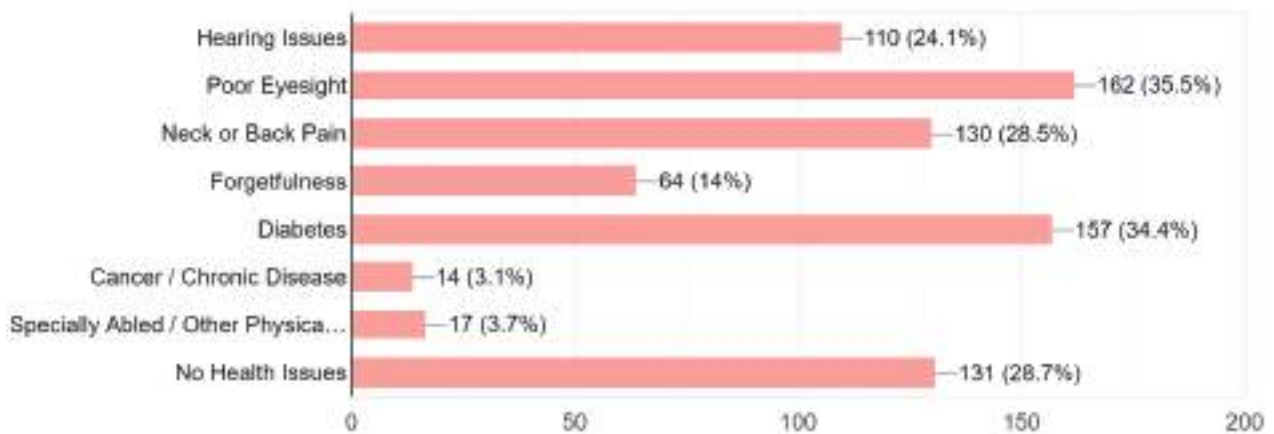
Do you have access to the internet?
456 responses

- Yes, Limited Data Access
- Yes, Unlimited Data Access
- No

43.4%
17.3%
39.3%
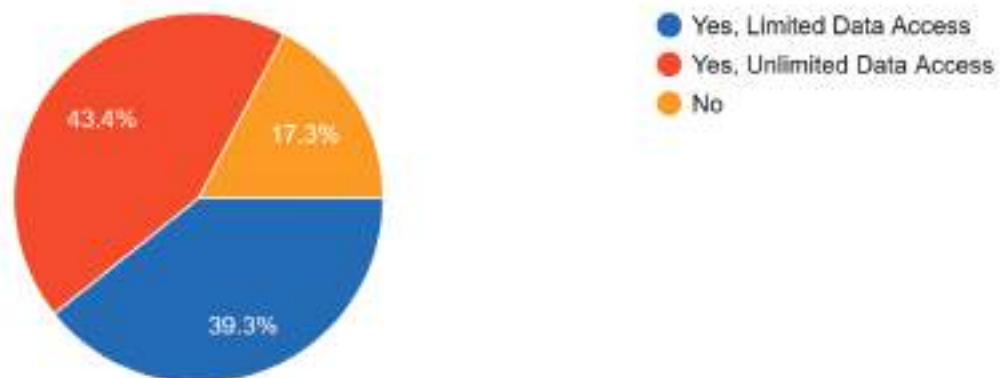
Do you own a digital device?
456 responses

- Yes
- No

18.2%
81.8%
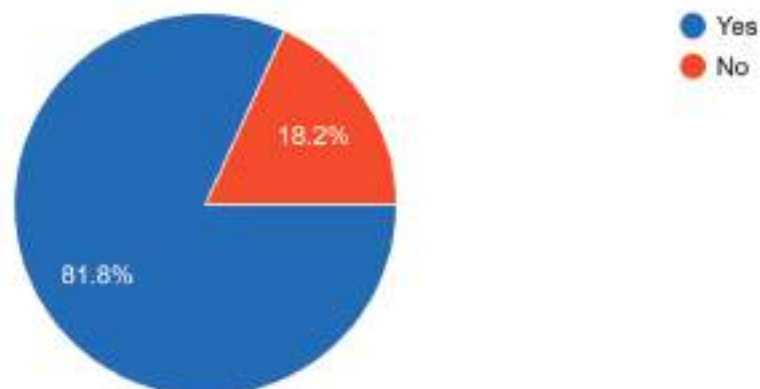
I do not use digital devices because: (Can choose multiple options)
83 responses

Option	Responses
I lack knowledge about digital devices	45 (54.2%)
I am not interested in using digital devices	34 (41%)
I feel digital devices are difficult to use	35 (42.2%)
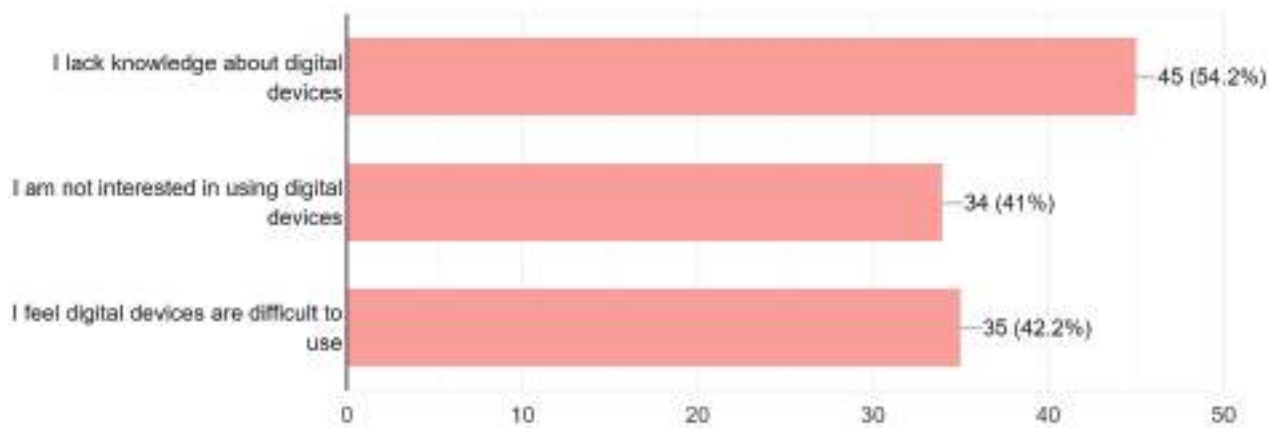
I would like to: (Can choose multiple options)
83 responses

Option	Responses
Own a digital device	12 (14.5%)
Get basic training on using digital devices	21 (25.3%)
Use digital devices on a day-to-day basis	8 (9.6%)
I would be happy without any digital devices	54 (65.1%)
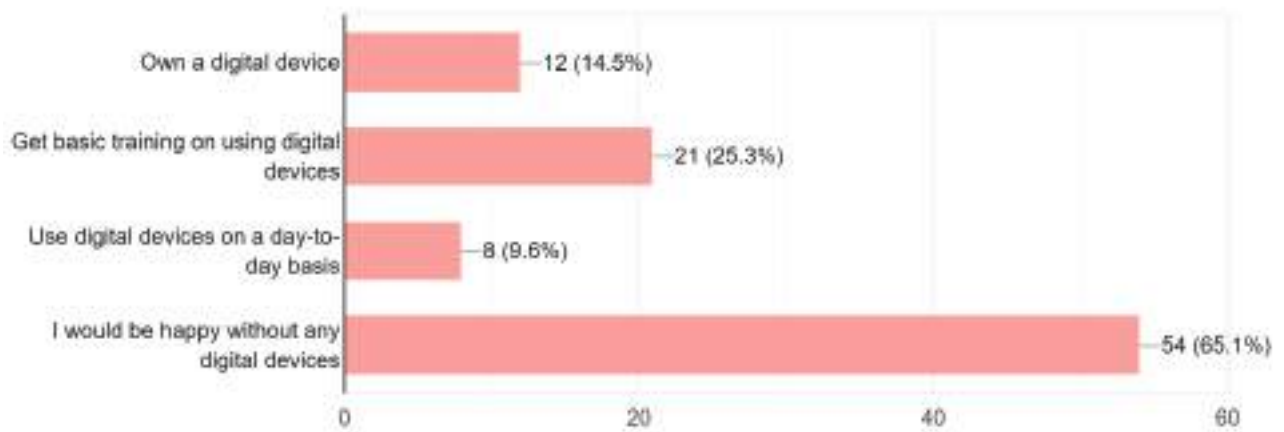
How many years have you been using digital devices for?
373 responses

- 0-2: 12.6%
- 2-5: 29.2%
- 5+: 58.2%
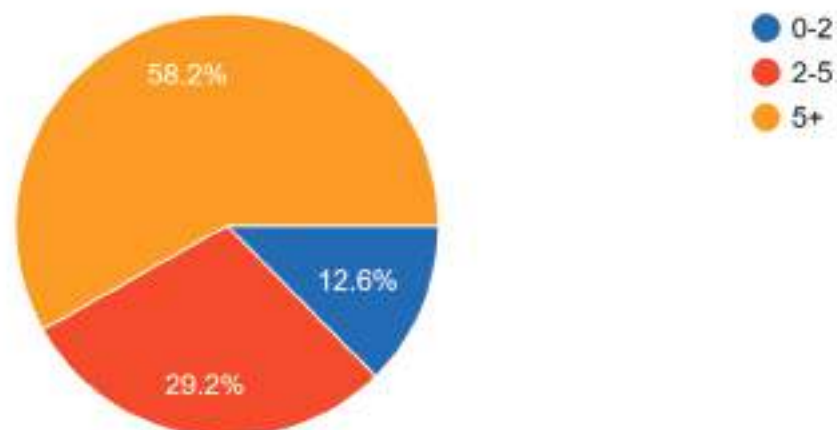
What all services do you use on your digital devices, and for how many hours in a day?

Legend: No | Low (Daily 0-2 hrs) | High (Daily 2+ hrs)

Categories: Social Media (Whatsapp/FB), Connect with Family/Friends, Entertainment (Youtube/OTT), Online Shopping (Grocery etc.), Online Classes/Trainings, Work/Profession

Categories: Digi Payment (GPay/Paytm etc.), Cab Booking (Ola/Uber), Google Maps, Smartphone Features (Alarms/Reminders etc.)
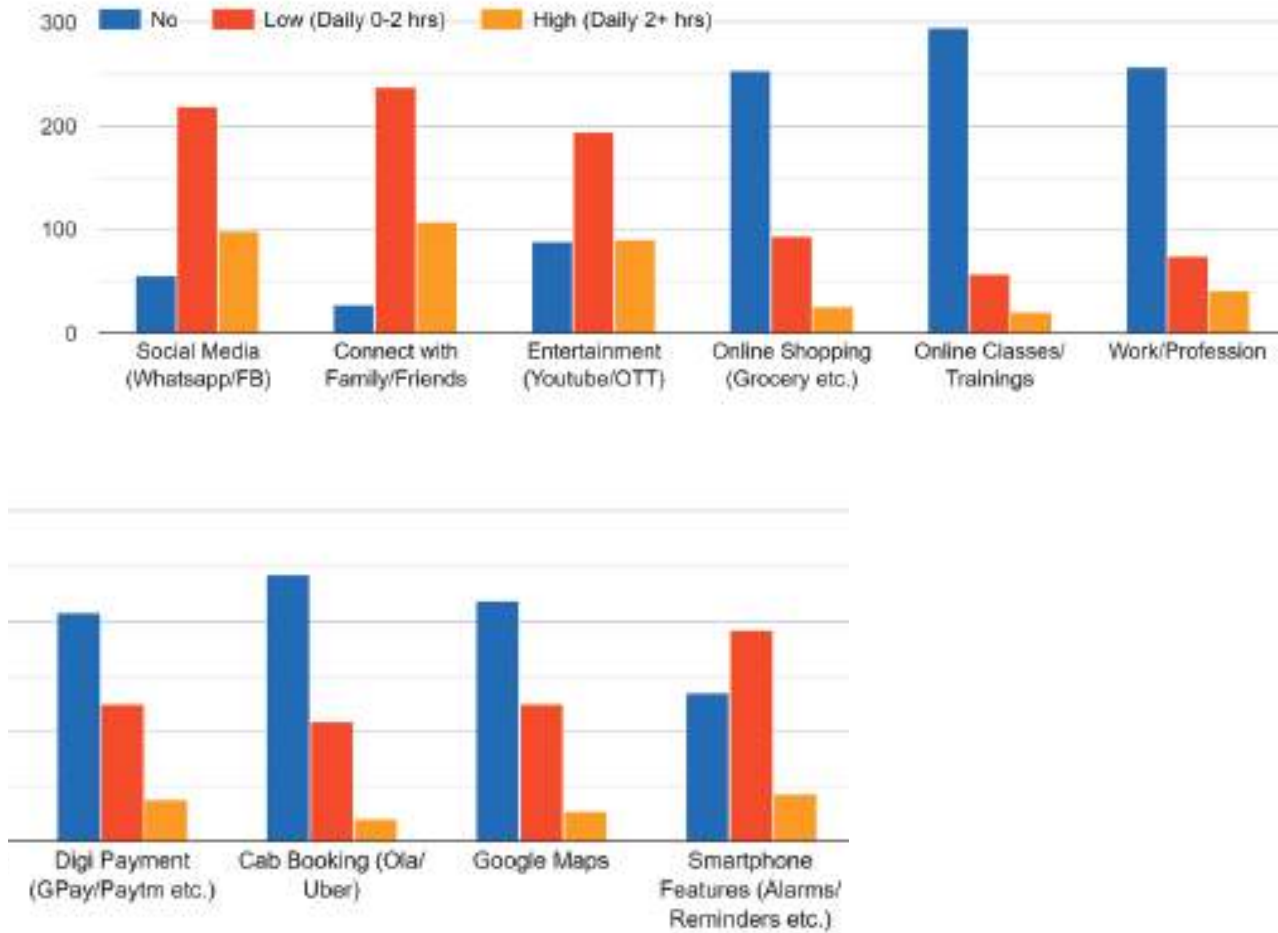
Do you use any of these financial services? (Can choose multiple options)
373 responses

Service	Value
Banking (Bank Transfers etc.)	201 (53.9%)
Fixed Deposits	133 (35.7%)
Mutual Funds	74 (19.8%)
Stocks / Trading	46 (12.3%)
No	137 (36.7%)
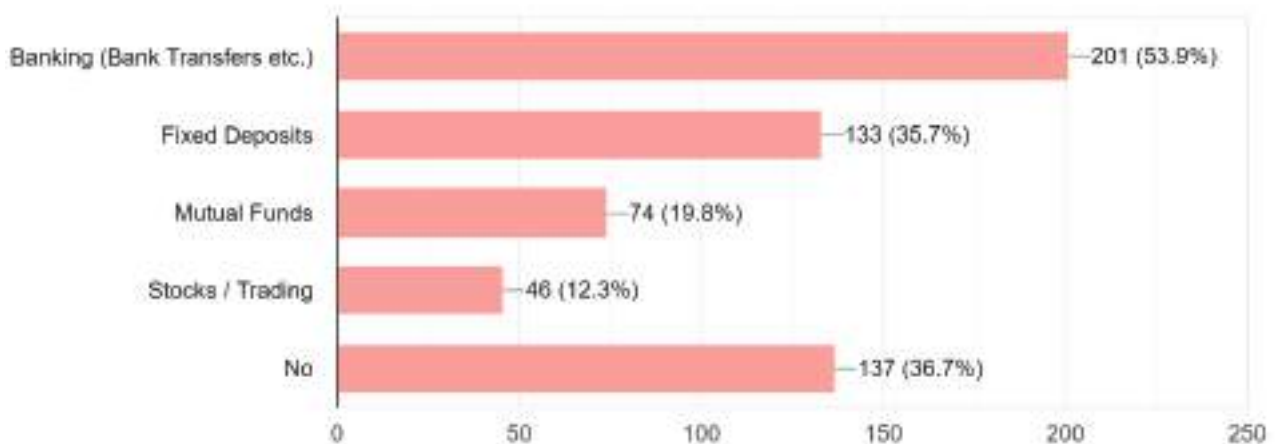
Are you aware of 'cookies' that track your movement, location and presence on the internet?
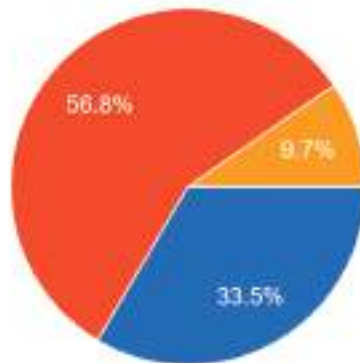
373 responses
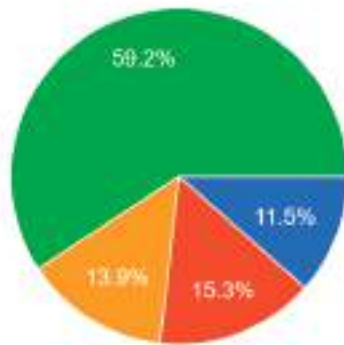
- Yes, I am aware, I give tracking consent
- Yes, I am aware, I do not give tracking consent
- Yes, I am aware, I give tracking consent only to mandatory cookies
- No, I am not aware

59.2%
11.5%
13.9%
15.3%

How comfortable do you feel while using digital devices?
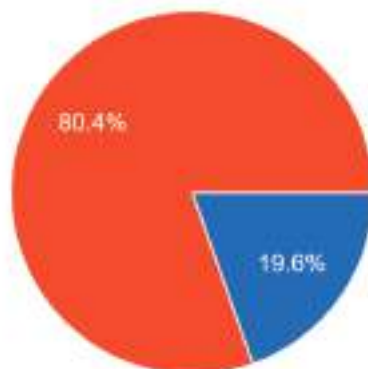
373 responses

- Use easily, without any problem
- Can use, need help sometimes
- Rarely able to use, need constant support

56.8%
9.7%
33.5%

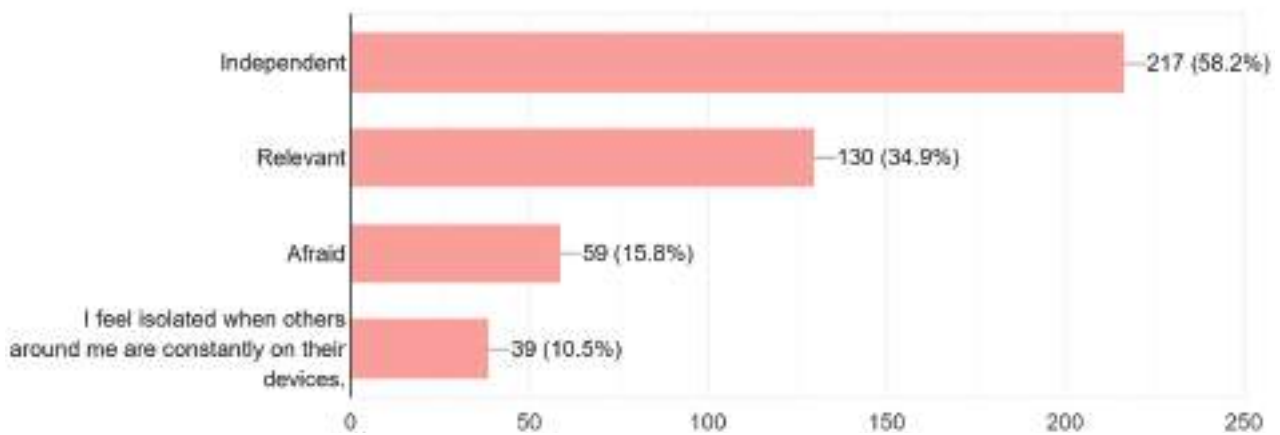## Which of these do you like?
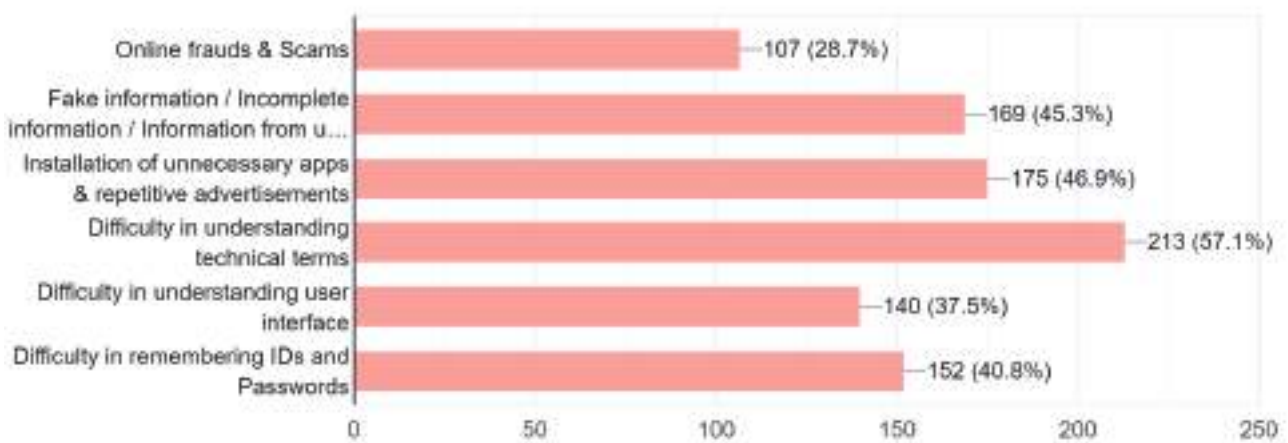
373 responses

- Button Keypad
- Touchscreen

80.4%
19.6%

How does using digital devices/services make you feel? (Can choose multiple options)
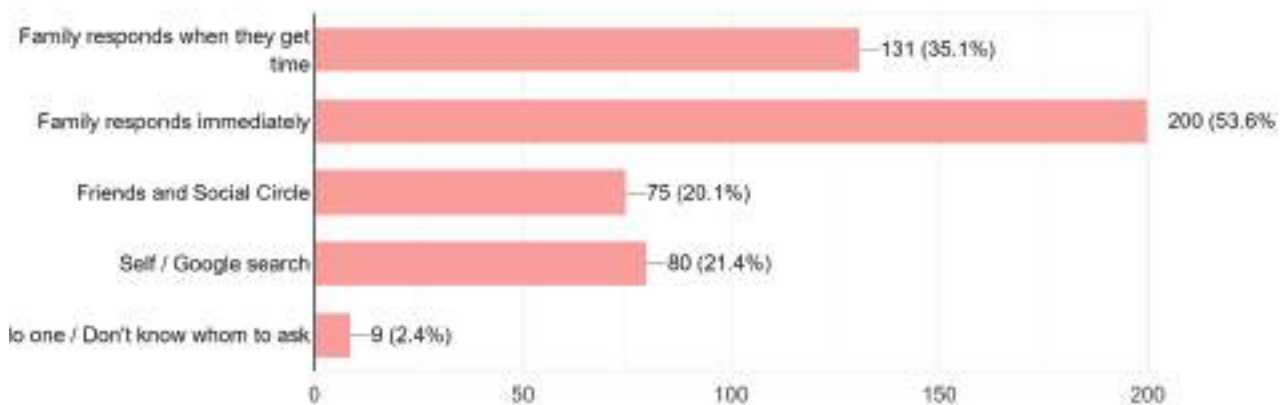373 responses

Category	Value
Independent	217 (58.2%)
Relevant	130 (34.9%)
Afraid	59 (15.8%)
I feel isolated when others around me are constantly on their devices.	39 (10.5%)

Do you face any of these issues while using digital device? (Can choose multiple options)
373 responses

Category	Value
Online frauds & Scams	107 (28.7%)
Fake information / Incomplete information / Information from u...	169 (45.3%)
Installation of unnecessary apps & repetitive advertisements	175 (46.9%)
Difficulty in understanding technical terms	213 (57.1%)
Difficulty in understanding user interface	140 (37.5%)
Difficulty in remembering IDs and Passwords	152 (40.8%)

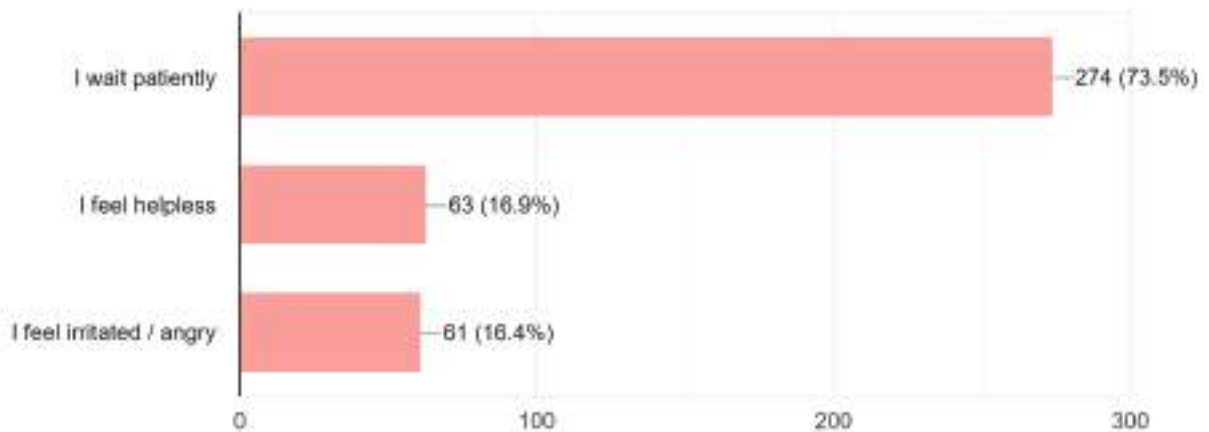## Who helps you when you run into technical issues on your device? (Can choose multiple options)
373 responses

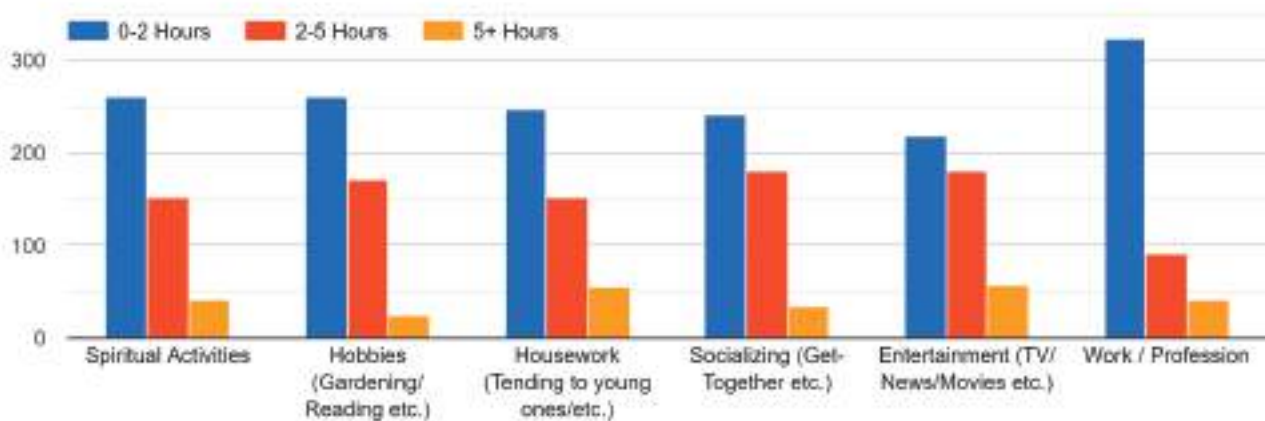| Category	Value
Family responds when they get time	131 (35.1%)
Family responds immediately	200 (53.6%)
Friends and Social Circle	75 (20.1%)
Self / Google search	80 (21.4%)
No one / Don't know whom to ask	9 (2.4%)

While waiting for a response, how do you feel about it? (Can choose multiple options)
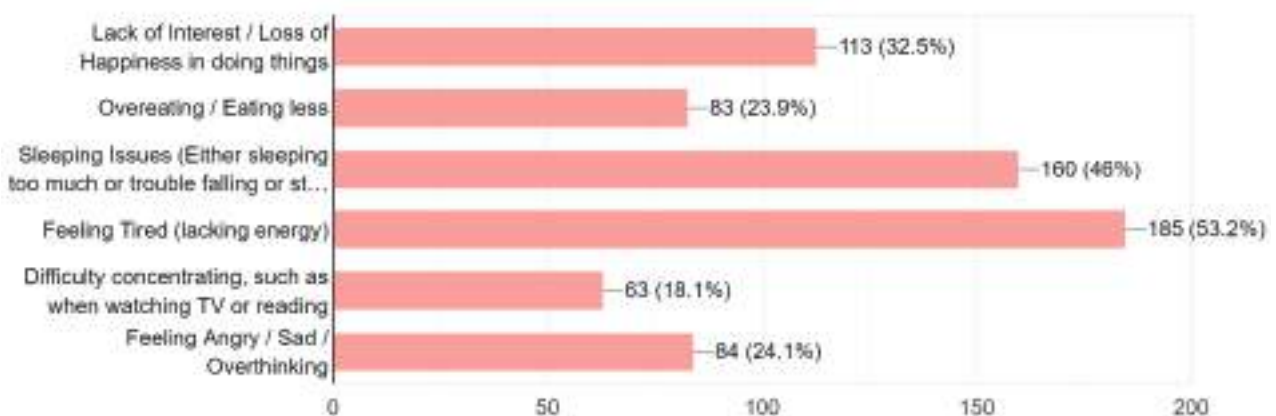
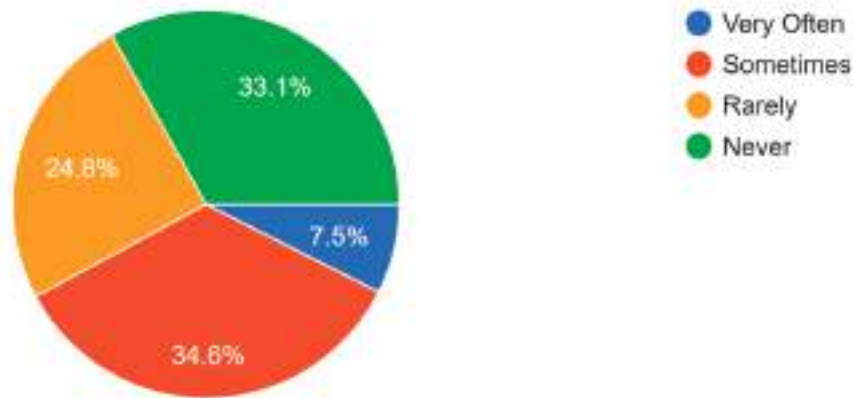373 responses

How many hours do you engage in the following?

Do you face any of these? (Can choose multiple options)
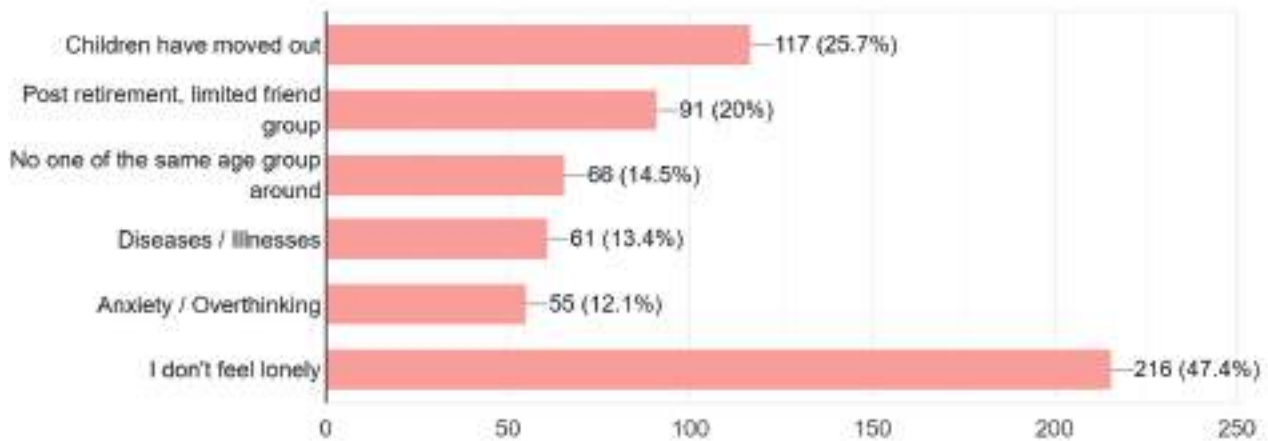
348 responses

How often do you feel lonely?

456 responses

- Very Often
- Sometimes
- Rarely
- Never

33.1%

24.8%

7.5%

34.6%

Why do you feel lonely? (Can choose multiple options)

456 responses

Children have moved out	117 (25.7%)
Post retirement, limited friend group	91 (20%)
No one of the same age group around	66 (14.5%)
Diseases / Illnesses	61 (13.4%)
Anxiety / Overthinking	55 (12.1%)
I don't feel lonely	216 (47.4%)

If the students of Symbiosis College start an online community to help you become digitally literate and answer your queries, would you be interested in joining?

456 responses

- Yes
- No
- I am digitally literate and would like to help others.

31.1%

8.8%

60.1%
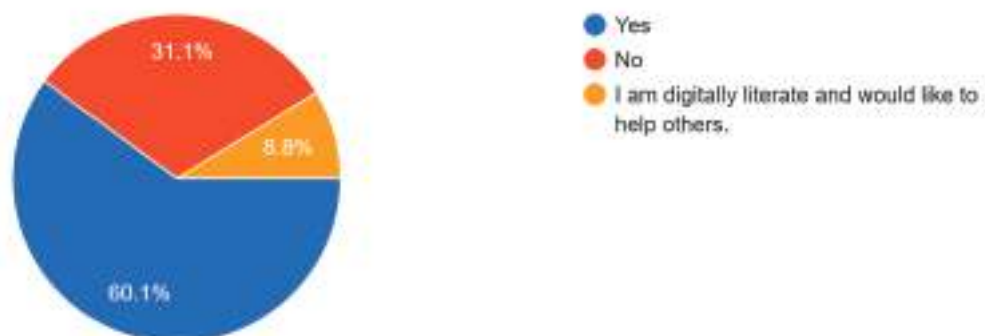
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Krishna Tilwani

Our seniors are capable, independent and keen learners, who need a nurturing hand to help them explore and navigate the digital world.

We, at SCAC pledge to bridge the digital gap by strengthening the technical know-how of our seniors in a safe ecosystem, enabling them to be self-reliant and enjoy their digital journey.

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