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Smart Phone Dependency

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SMART PHONE DEPENDENCY

An investigation into whether modern day society is overly dependant on smartphones, measuring to what extent day to day living has become inaccessible to those without access to smart devices.

DECLARATION

This is to certify that the work I am submitting is my own and has not been submitted for another degree, either at University College Cork or elsewhere. All external references and sources are clearly acknowledged and identified within the confines of this report. I have read and understood the regulations of University College Cork concerning plagiarism and intellectual property.

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1.0 • INTRODUCTION

Over the past ten years, smart phones have become increasingly popular within modern society. They are extremely convenient pieces of technology, allowing us to access the internet, our music, our movies and keep us in touch with our friends and family on the go. This convenience is useful however, the negative aspects of smart phones have also been well documented. It could be claimed that owning a smartphone has evolved beyond convenience, to now becoming a necessity for participation in modern society. For my final year project, I am attempting to explore the accessibility of modern society for individuals without smartphones.

The widespread adoption of smartphones has occurred relatively recently, within the last decade or so. This timeframe is important when discussing the context of this project. As our dependency on smartphones become more ingrained over time, certain parts of daily life may increasingly be only accessible to smartphone users, marginalising those without access to such devices. The establishment of these social norms take time and despite smartphones being commonplace for over a decade, only in recent years have we begun assuming widespread smartphone ownership across age and demographic lines. Despite efforts to find similar studies addressing this project's question, there is a notable absence of literature examining accessibility from this sociological perspective. Many existing accounts on both accessibility and technology, tend to focus on assessing how accessible technology is to society. This regards the usability of smartphone features or the accessibility of applications for individuals with disabilities. However, this project seeks to investigate the inverse question by examining how accessible society is to those without smartphones.

While sources specifically addressing smartphone usage from the perspective of societal accessibility is scarce, there is a large amount of anecdotal evidence from individuals who have chosen to disregard smartphones and shared their experiences. While predominantly non-academic, these accounts are valuable with regards to highlighting both the perceived challenges and benefits associated with relinquishing smartphones. For example, in "Why I switched to a dumb phone and iPod (I won't be going back)" (Horn, 2023), the author briefly explores the mental health implications of abandoning smartphones and references the practice of mental health institutions removing phones from patients in crisis situations.

Though lacking specific empirical evidence, such accounts shed light on the negative mental health effects associated with excessive smartphone use.

Typically this research revolves around utilising "older" technology as substitutes for smartphones and examining the accessibility challenges stemming from this choice. By "older," this refers to devices popularised ten to fifteen years ago, predating the mass adoption of smartphones. For instance, the video mentions using an old iPod for music and a non-smart cellular phone for calls and texts - an arrangement which will become central to this project's data retrieval.

Present within the video is the theorising of why mental health institutions tend to remove a person's phone from them when they're under dire mental circumstances. The conclusion that is reached by Horn is that in order to heal from dire mental health issues, you have to remove your mobile device from your life or at the very least control it in some manner. Although the video itself does not cite a specific reasonings for this, it does serve as an example to the kind of negative mental health effects that have been perceived to occur with the over use of smart devices.

"Generally speaking, it has been shown that IT addiction challenges users. IT addiction can have an adverse effect on individuals' offline social life because addicts have less real life interaction with friends and family. This might result in interpersonal conflict, social isolation or marital quarrel. Interestingly, addictive behavior does not automatically lead to intentions to discontinue use such that IT use fatigue is common. Furthermore, IT addiction might also distract users from work tasks and have negative consequences on their professional life, such as lower productivity."(Maier, 2020)

This project is not about measuring whether smartphones are a force for good within modern society. It is also not primarily concerned with social media addiction or the ethical dilemmas of trusting large corporations with a device that tracks a person's daily actions. This project is first and foremost, dedicated to measuring how accessible day to day life is without access to a smart device. The reason for bringing up the negatives associated with smartphones such as social media addiction is to highlight the fact that smartphones can be harmful to the public. The very notion that smartphones could be harmful to the public, is in itself reason to study whether we can go without smartphones in the modern day. A worst case scenario would be that it is impossible for a vast majority of people to disregard

their smartphone and as such, must continue to possess a device that will harm them over the course of their lifetime.

The previously mentioned video, raises the issue of smartphone alternatives and their viability in contemporary society. This is a crucial aspect of the project as when determining whether it is possible to not use smartphones, it is important to determine what constitutes a smartphone. For the purposes of this project, the terms smartphone and smart device will be used interchangeably when referring to cellular devices that possess a touch screen and run a mobile operating system such as IOS or Android. This includes products with similar capabilities to devices such as iPhones. This loose definition could technically be applied to more products outside the scope of this project such as tablets, smart watches and augmented reality headsets however they will be disregarded for the purpose of scope and sociological focus. This project aims to tackle the sociological implications of smartphone dependancy as a result of their popularity. The same dependancy and popularity don't appear to be present with the other aforementioned product types and as such, will not be featured within this report with regards to dependancy although may resurface as potential smartphone alternatives within the methodology.

This final year project is divided into two sections when it comes to conducting research and creating usable datasets. The first is an auto - ethnographic study in which I will be forgoing the use of my smart phone for the duration of three months and recording instances of inaccessibility in my day to day life. The second will be a survey that is designed to ask the users about their smartphone usage and their perceptions of life without their smartphones. The datasets from both sections of the will be available on a website created specially for this project at the domain featured below. This website as well as my created datasets are this projects digital artefact.

maxwellcallanan.com

2.0 • BACKGROUND & RELATED WORK

As previously stated, the purpose of this project is to better understand the inaccessibilities that come with disregarding a persons smartphone in everyday life. In asking this however, it is necessary to debate if this is a question that warrants investigation and whether the methods of this project are academically viable. Given this, we must first understand the concepts of universal design when applied to technology and when applied to a society. Both are necessary to understand this project as although this investigation revolves around smartphones and the use of technology, the investigation itself is sociological. In essence, this project concerns itself with the sociological connotations of smartphones and not the technology present within smartphones themselves.

“As Ronald Mace, one of the founders of the concept, wrote, universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (DOLMAGE, 2017) When discussing environments, this can be applied to real world physical environments. Physical examples such as wheelchair friendly architecture and braille / tactile signage would be considered aspect of universal design with regards to architecture. With regards to smart device technology, this includes features that allow the user to customise their experience in order to better take advantage of the smart device. Examples of this include colour and text customisation. Within much software, colour customisation allows the user to alter the colours of the user interface in order to make it easier for them to perceive the displayed contents. This is most commonly used for the colour blind or people who are otherwise visually impaired and require more clarity. The same goes for text customisation, some fonts are more difficult to read than others, additionally the default text on a given application can often be too small for visually impaired readers, requiring a customisable option be available to the user if the device is to be considered universally accessible.

While a single person navigating a given society does not possess the ability to customise their experience of it in ways that are as influential as the power that a person has over a smart device. When it comes to measuring accessibility, it’s important to develop an understanding of what an accessible society looks like. Generally speaking, an accessible society understands and respects the requirements of its members. This applies to all members regardless of race, gender or disability. “Society itself can see its ethical ideals

better upheld by catering for a broader variation of characteristics and capabilities in the design of technological support.“ (Persson, 2014)

There are physical aspects to an accessible society that include things such as buildings and transportation systems that are accessible to all members of a population. This applies to all areas in a community such as parks, pathways, post offices and government buildings. An emphasis should also be placed on information and the ability able to access that information. This requires data to be stored and readily available in multiple formats. This is not only referring to physical and digital formats but also in formats such as braille and optional audio formats in order to be accessed by disabled communities.

Although smartphones are responsible for connecting societies and bringing communities together, the purpose of the project is to highlight the potential inaccessibility's that come with not having a smart phone. Compared to the pre – smartphone era, it's difficult to argue whether society has become more accessible or not. Although there have been incredible strides with regards to accessing information, connecting communities and work opportunities, other accessibility issue have arisen. When looking to disengage from a particular lifestyle, it is important to assess the alternatives available to you under your circumstances. If we're attempting to disengage from a smart device orientated lifestyle, then we have to look at what devices like smartphones do for us in each of our individual cases.

The journal “Can Information and Communications Technology Enhance Social Quality?” (Wallace, 2012) addresses this question first and foremost. Within the article, the focus lies on developing countries and the benefits that they gain specifically from smart devices.

Smart devices also improve accessibility with regards to interacting with a community. This is particularly true for individuals who reside in remote locations. Granting access to social media, education, entrepreneurship and employment significant improves the opportunities available to such communities. These are important to note before delving into much of this project as generally speaking, this project concerns itself with issues that derive from smart phone usage. Although I believe that they could potentially be a negative in most developed countries due to our supposed over reliance on them, they are undoubtedly potential forces for good in developing countries.

For most people, smartphones are a primary method of communication and consuming media. This means that it is essential to plan for other methods of consuming media. As a part of the project, I still plan on using laptops and desk computers in my day to day life as these were still available in the pre smartphone era. It's also important to note an overarching theme of this project, and that the concept of this project goes against consumerism. There is perception that software is inherently clean, as if software is this concept that doesn't take up space and can't use up natural resources. This applies to all kinds of software, whether its, basic code, an image file, an application or something as topical as artificial intelligence.

“ The term “artificial intelligence may invoke ideas of algorithms, data, and computer architectures, but none of that can function without the minerals and resources that build computing’s core components. Rechargeable lithium – ion batteries are essential for mobile devices and laptops, in home digital assistants and data centre backup power. They undergird the internet and every commerce platform that runs on it, from banking to retail to stock market trades...The cloud is the backbone of artificial intelligence industry, and it’s made of rocks, lithium, brine and crude oil” (Crawford, 2021) Additionally, the idea that most people in developed nations, upgrade their smart devices every few years is something that is put into question when using older technology.

For example, laptops and personal computers from ten years ago are of course going to be less powerful than computing devices made today. However in terms of features, there is very little difference in the capabilities between older and newer devices. Anecdotally, I noticed this when I was initially researching this project, I found an original iPhone from 2007 that a relative of mine used to own. In terms of features, it still had internet access, Bluetooth capabilities, a camera and even an app store. It occurred to me that if the software on this device was still properly supported and maybe if I swapped out the battery, I could very easily be using this product today.

This brings environmental sustainability into the conversation as there are millions of devices similar to these that exist today that are no longer in use or being updated because its no longer profitable to do so. From a waste management perspective, it's important to understand the capabilities of the devices that we're throwing away and observe how similar they are to the new devices we update to every few years. This has become common discourse in recent years, particularly with phones, many stating that

large companies like Apple release the same product every year. To further expand that idea, I would argue that companies have been releasing the same product since the beginning of the modern smart phone era and only through marketing and consumerism do newer devices have any appeal. When using older technology which my project heavily involves, it is essential to understand the environmental implications of the decisions we make as a society. When the norm is to regularly ditch our usable technology for newer devices with the same features, this generates continuous waste and does not improve the quality of our lives.

In essence, not only is it necessary to verify whether it is possible to disregard smart phones from an accessibility perspective but also from an environmental perspective.

3.0 • METHODOLOGY

3.1 • Auto - Ethnographic Report

The purpose of this project is to document the societal issues and inaccessibilities that come with living without access to a smart phone. As such, I took it upon myself to document my findings concerning going without a smart device for an extended period of time, December 2023 to February 2024. This caused several issues with regards to personal, professional and academic life. Habits like checking Canvas for college work and updates, became unlearned. Without access to a smart device when out of the house, I'm unable to see any updates or news regarding gradings, room changes or other events / opportunities that occur on the college campus. It should be pointed out that this was not an issue for a majority of the days attending college, timetables stayed relatively stable and a habit was made to login to canvas every evening via laptop in order to check for any updates that might have been missed.

That being said, it did pose an interesting occurrence when I did inevitably miss a lecture or a room change as a result of not having access to a smart device. There were several instances for which I lacked the information to properly attend a class or networking event. However, once I informed my other classmates about the issues regarding this project, they were more than willing to accommodate me. They were aware of the kind of sacrifices that I would be making as part of my final year project and as such, offered their personal phone numbers to me. In order to document my day to day ventures, I couldn't rely on my smartphone anymore. Instead I had to use pen and paper for everything. Over the course of the few months, I documented everything in my journal which resulted in me needing to transcribe all data and information regarding my project. This included moments of inaccessibility with regards to social events, networking opportunities, work opportunities, transport opportunities and missing messages from friends and family.

There were moments where the project put an strain on aspects of my professional career. When working in marketing, social media becomes an incredibly important tool to access. In addition to my area of work, my work is freelance, meaning I don't operate under one company or one boss. This meant that for every new client, initially I had to explain my limitations the regarding my phone and social media access. This resulted in losing several clients during interview processes for such reasons.

As the project progressed, there was a gradual decision to keeping this information from any potential clients and job opportunities purely in order to keep work. It wasn't impossible to not perform social media without a smartphone however it was certainly limiting. Instagram in particular was incredibly difficult. Although there is a web based version of the Instagram application, it lack many critical features that a typical marketer would rely on in order to drive views. This includes but is not limited to making story content and adding music to posts. This may sound initially trivial however with regards to generating views and interactions online, these are some of the most effective methods of doing so. Working primarily from a laptop develops other problems from an SEO perspective. I asked Robyn Ree who is the Digital Marketing Executive from TodayFM about issues that might arise from only working from a laptop and not a phone and she highlighted that I will inevitably perform worse as result of Instagram's algorithm. The social media application favours content developed and edited on the mobile version of the application, meaning that I would be at a severe disadvantage against other posts which have statistically most likely been posted from mobile devices. This resulted in a compromise on some degree, I couldn't afford to sacrifice my source of income for my final year project. As a result, I downloaded the mobile version of the application on an old tablet in an effort to reach a middle ground. I should note that this device never left my home for the duration of this project and would only used as an extension of my at home workflow, granting me access to mobile benefits and standard SEO performance.

This does raise an unexpected issue regarding my project however. Given that this research is being done to study how accessible life can be without the use of a smart device. The fact that there is a loss in clients over the project's limitations means that on some level, even with a fully functioning laptop, I am unable to perform my work to a satisfactory standard. Not as a result of my skill level but instead potentially as a result of the popularity of phones in general. It's not barrier that I expected to come across, especially that regarding my project, I thought I was taking the easy way out by still being able to use my laptop and desktop computers. This proved not to be the case however as even with more powerful machinery, portable smart devices like smartphones are required for many areas of work.

There were times unfortunately where regardless of circumstances, I was required to break the rules of the project in order to fulfil my duties to others in my life. This included

times where friends or family were sick and needed tending to but were otherwise unaware of my project, resulting in them messaging and calling me on social media where of course I would not see the texts until I was working from my laptop and I would never know if I was called. As a result, I always kept my phone charged at home just in case of some emergencies. This speaks to the social norms that I think we keep around both phones and social media. Social media was one of the aspects of life that I was going to be severely limiting myself with this project. This was a welcome change in my life to be sure but definitely one that came with social disadvantages.

Social media as we know it has become an amalgamation of several different application types within the past few years. Only a couple of years ago, Instagram was for sharing photos and videos with friends. Gradually, much additional functionality has been added to the application that the active experience of using it becomes inherently different. For example, the addition of markets to the application with in app purchases make the application much more business oriented. Additionally, the implementation of reels creates a much more addictive flow to the overall usage of the application as whenever you even go to open the Instagram app, video will immediately begin to play and scroll automatically. This for sure, is also to be said about the likes of TikTok and YouTube as well however these types of implementations are still relatively new. The largest change regarding accessibility however definitely occurred a couple of years ago in the advent of Instagram messaging. On the surface, it's a convenient messaging application built right into Instagram. It is functional and incredibly easy to use. Unfortunately this has resulted in a wide scale mass adoption of Instagram for the usage of only messaging.

The issue with this lies in social accessibility. If a person doesn't have a smartphone and doesn't have access to Instagram on their person 24/7 that means that they will inevitably miss calls, texts and messages from most of their friends on a regular basis. They will also miss out on events that are advertised there and group gatherings. These events can range from major to minor events, particularly within a college setting. As an example, there are moments where our college timetable will change on days where we have classes. These days are admittedly few and far between however typically, students would be notified via canvas notifications on their smart devices. The only method that I have of checking my canvas student notifications are via a laptop or desktop at home. This means that while commuting to college (and even between lectures) I have no way of knowing any timetable updates without depending on someone else informing me. This has

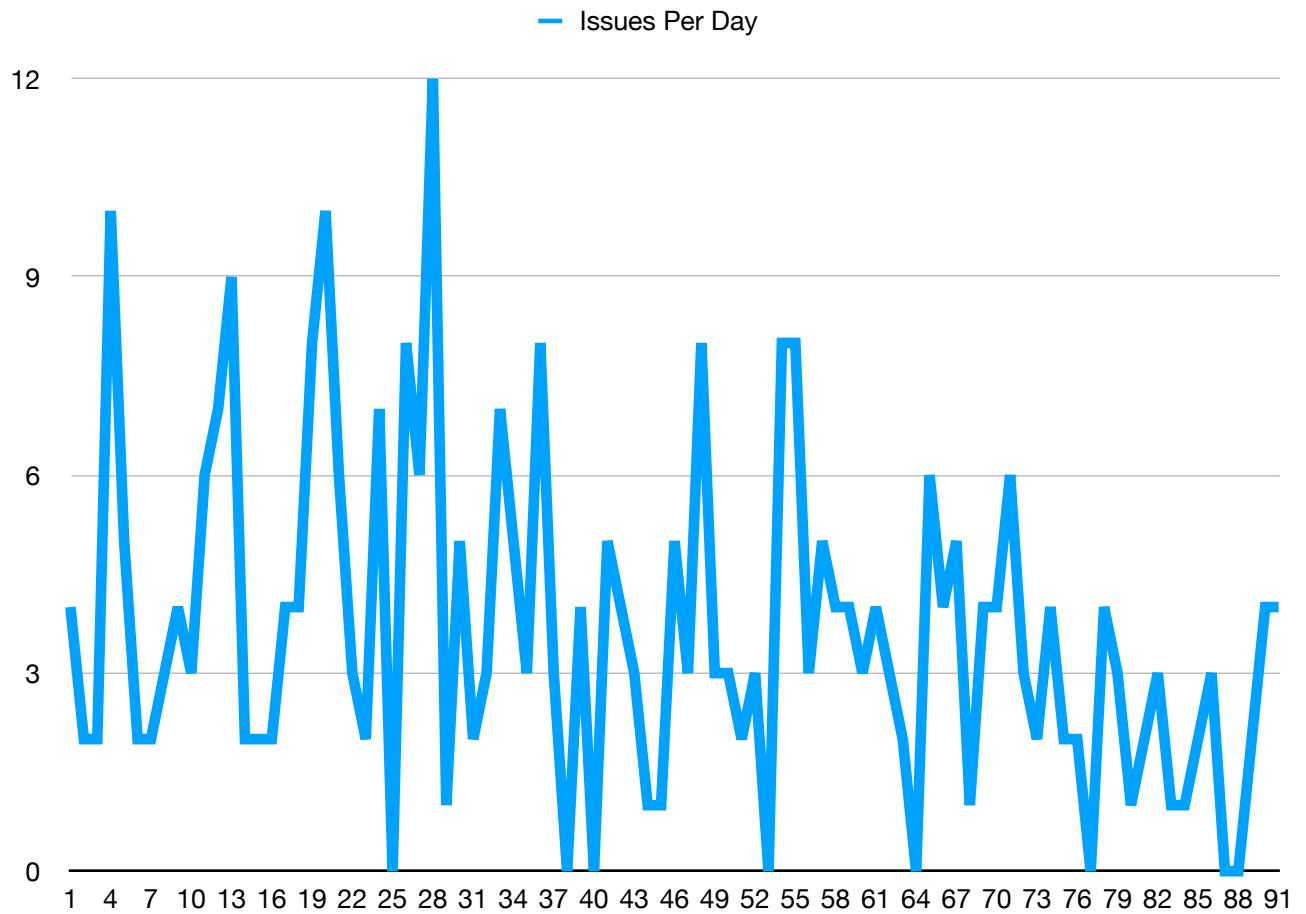
resulted in the odd missed class (although not all missed classes are a result of this) where simply because I lacked a smart phone, I was unable to navigate my schedule successfully.

This naturally found its way into other aspects of my life. Typically this took the form of minor issues that nevertheless made navigating everyday life more difficult. Transportation for example was more inaccessible as a result of me not having access to a smartphone. I should point out for the sake of the study that I do not have access to a car, meaning that for the duration of this project, I was using public transportation as my primary method of commute. This resulted in me relying on my Leapcard and physical cash / change whenever I needed to travel longer distances. This was not something I needed to adapt to much with the exception of one critical aspect. Leapcards can be topped up from smart devices with NFC capabilities but I did not have access to these devices during this project. As a result, I could only top up my Leapcard at shops in Cork City that offer a top up service.

With regards to the overall outlook of the three months spent without the usage of a mobile smart device, the main takeaway from the experience was that although there were many frustrations with disregarding a smart device for the duration of the project. Many of the inconveniences that were suffered were ultimately minor. This is however a matter of interpretation. For example, the loss of work clients as a result of my lack of a smart phone is definitely a major issue, especially when scaled up to a societal level and indeed was an issue that I had to work around with regards to this project. Additionally, it's important to note that although a dataset has been recorded over the course of this experience, my perspective is one of many. I am a college student who lives local to where I study. My experience with forgoing a smartphone is going to be vastly different to someone who's full time job requires them to be available 24/7 and especially someone in a different field of work. As a result, there is implicit bias within the dataset that was constructed. Especially with regards to what this project would consider an accessibility issue. What could be considered an accessibility issue to my lifestyle might be a minor inconvenience to another person's lifestyle and vice versa. These biases are essential to interpreting and making use of the dataset displayed below and are an effective reasoning to do additional research in the form of survey questions presented later within this project, in order to form a more nuanced opinion.

The process of daily data collection culminated in the dataset below, detailing the daily instances where something was inaccessible as a result of me not having access to a smart phone. There are several ideas that we can potentially conclude from the dataset below. The first one being that there is a steady decrease in the amount of accessibility issues faced over the course of the few months.

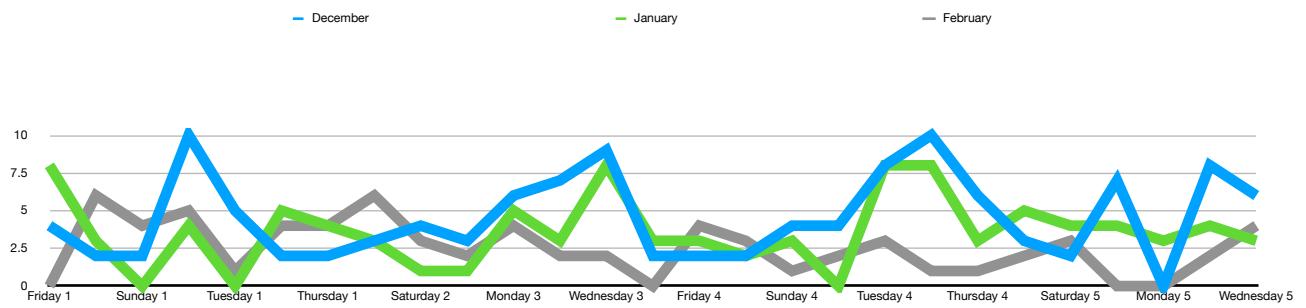
Figure below displays dataset by Days



Something similar to this dataset could possibly have been predicted at the beginning of the project as it is only natural to assume that someone would grow more accustomed to not having a smartphone and discover work arounds to inaccessibilities. One such example was with regards to transportation. As previously stated, I use on Leapcards in order to access public transportation which previously I relied on my smartphone in order to keep topped up however after a while it became routine to top up in local shops that

offered the service. It is possible to take an alternative look at the same dataset by trimming certain aspects and evaluating each month against each other by lining up the week days. Initially, there was a comparison created between the months via their date however there was little to no correlation with this dataset. Below however, displays the issues experiences over in accordance with the day of the week over the course of three months.

Figure below displays dataset by dates within each Month (ie, first Friday of each month, second Saturday of each month etc etc)



There appears to be a consistent rise and fall with each week and weekend possibly as a result of the fact that my schedule is much busier during the week days with work and college requiring me to interact more with the outside world and thus experiencing more issues than I otherwise would staying at home on the weekends.

3.2 • Surveyed Report

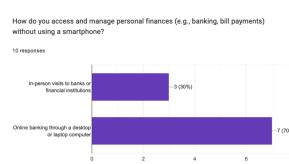
The following datasets are samples from an online survey that was conducted for this project. Each question revolves around asking the user about their smart phone usage and how they would perceive hypothetically living without their smart devices. This section is present in order to grant a more nuanced perspective and context to the survey's dataset.

3.2 • Financial Management

How do you access and manage personal finances (e.g., banking, bill payments) without using a smartphone? - This question had ten participant responses in the survey with three stating that they use in person banks and seven stating that they use online banking through desktop or laptop computers, resulting in a 30% / 70% skew.

Financial Management

"How do you manage personal finances without using a smartphone?"



3.2 • Financial Frequency

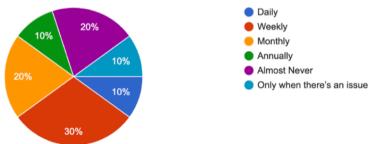
How often do you manage personal finances using the method you've selected above? - This question had ten participant responses in the survey and is a direct followup to the above question. When given the choice between the following (Daily, Weekly, Monthly, Annually, Almost Never & Only when there's an issue) the most common answer was weekly with 30% of the surveyed selecting it. This was followed by Monthly with 20% of votes and Almost Never also with 20%. The rest were only selected each by 10% of the surveyed users.

Financial Frequency

"How often do you manage personal finances using the method you've selected?"

How often do you manage personal finances using the method you've selected above Copy

10 responses



3.2 • Alternative Methods of Communications

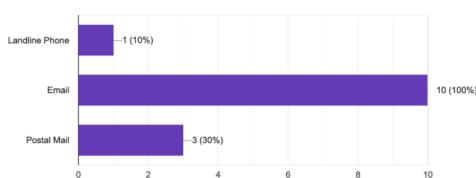
What alternative methods do you use to communicate with others in the absence of a smartphone? (Select all that apply) - This questions had ten participants with all of them stating that they use email for communication, three of them stating that they use postal mail and one of them stating that they use a landline phone.

Alternate Communication Methods

"What alternative methods do you use to communicate with others in the absence of a smartphone?"

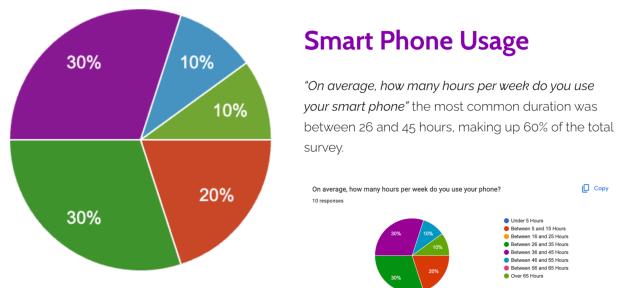
What alternative methods do you use to communicate with others in the absence of a smartphone? (Select all that apply) Copy

10 responses



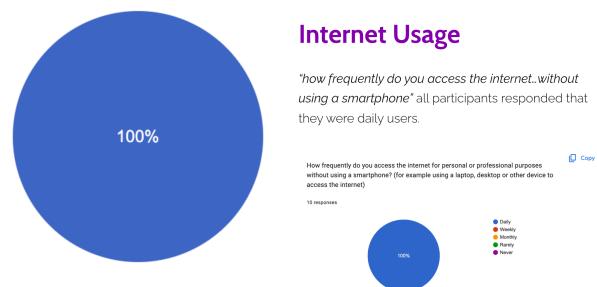
3.2 • Smart Phone Usage

On average, how many hours per week do you use your phone? - This question had ten participants with three of them stating that they use their phone between 36 and 45 hours per week, another three of them stating that they use their phone between 26 and 35 hours a week, two stating that they use their phone between five and fifteen hours a week, one stating that they use their phone between 46 and 55 hours and one stating that they use their phone for over 65 hours per week.



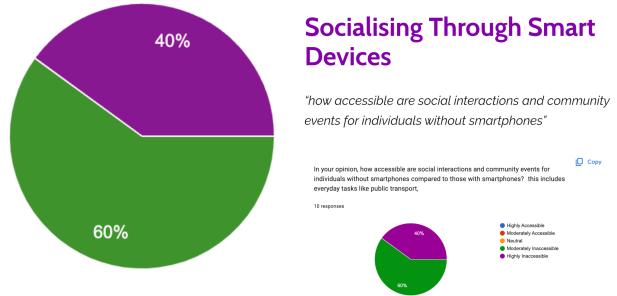
3.2 • Internet Usage

How frequently do you access the internet for personal or professional purposes without using a smartphone? (for example using a laptop, desktop or other device to access the internet) - This questions had ten participants with all of them responding that they use the internet in one of these forms daily even when given the options from Daily, Weekly, Monthly, Rarely, Never.



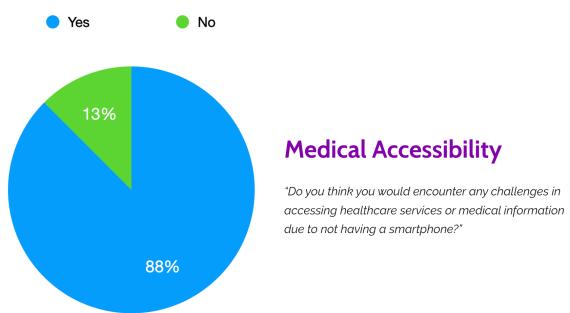
3.2 • Socialising through smartphone

In your opinion, how accessible are social interactions and community events for individuals without smartphones compared to those with smartphones? (this includes everyday tasks like public transport) - This question had ten participants with six of them stating moderately inaccessible and the remaining four of them stating highly inaccessible.



3.2 • Medical Accessibility

Do you think you would encounter any challenges in accessing healthcare services or medical information due to not having a smartphone? If yes, please describe. - This question had nine participants with eight of them stating that they would encounter challenges in accessing healthcare services without a smartphone. Comments continually cite how appointments are made through smartphone applications or certain information is only available through smart devices. Shown below are comments that are detailed enough to extrapolate more information from (ie. No simple Yes/No answers)



“Absolutely yes. So many appointments are made via text or phone call, so much useful information is online, etc”

“Yes, I have previously gotten MRI's and the resulting scans are only available for me to see through a smartphone app. Making appointments for MRI scans are also done online”

“Yes. I wouldn't be able to find addresses or phone numbers. If it was a service I hadn't used before I wouldn't be able to find it. Also, the vhi app is the only way I know how to claim money back from medical bills.”

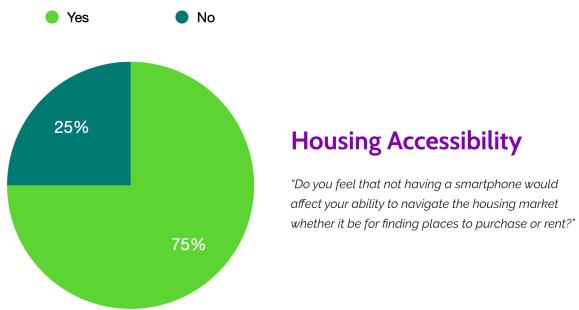
“Yes. I book appointments by calling the clinic with my phone. The radiology service I use allows me to access my scans and radiology reports through their app”

“Yes, I book doctors appointments online and when I can't get one I use an online doctor”

“Yes. Most if not all of my recent healthcare interactions have been done through my smartphone. As well as that, most healthcare numbers can only be found online”

3.2 • Housing Accessibility

Do you feel that not having a smartphone would affect your ability to navigate the housing market whether it be for finding places to purchase or rent? If yes, please explain how. - This question had eight participants with six of them responding Yes and two responding No. Shown below are comments that are detailed enough to extrapolate more information from (ie. No simple Yes/No answers)



"Yes. A lot of rental opportunities are going through texting friends. It's very hard to find anything just through websites. Even then the convenience of the smartphone and being able to check housing opportunities at any moment boost your chances of finding something suitable"

"Yes. Websites like daft.ie and Facebook groups are the only way I know to house search"

"Yes, the market is moving quickly and require a quick response once posted online, often through email. Also to see what's available, amenities nearby, etc."

"No, could use a laptop."

"Yes. Currently a lot of the renting market is accessible only through the internet, or Facebook, having no access to a smart device would somewhat hinder my ability to search for housing."

3.2 • Networking Accessibility

Do you feel that not having a smartphone would affect your ability to participate in social or professional networking opportunities? If yes, please explain how.



Most social opportunities are organised through social media

Yes, you simply wouldn't hear about them unless you're already in the network, which somewhat defeats the point

Yes, talking through call/text can feel a lot more genuine and informal than emailing or writing letters and in my experience having a phone has allowed me to make many friends I otherwise never would have gotten to meet

Yes, to the point where it would be much harder to find out about such events or opportunities.

Apps and networking are synonymous now, e.g LinkedIn and Indeed

Yes. All social interactions are organised over the phone now. Even workplace events are organised over Microsoft teams. If you don't participate, the only way you would find out is if someone specifically remembered to mention it to you.

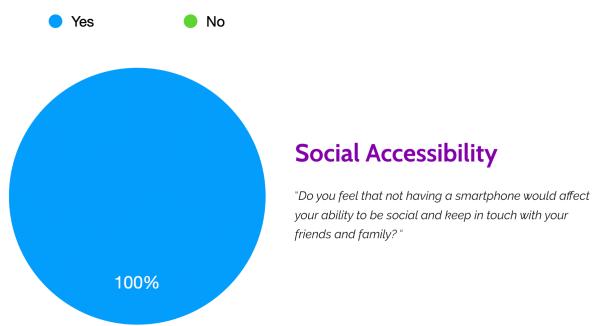
Yes. My course has a WhatsApp group chat and whenever I am at work/on placement we use WhatsApp or another messaging app to communicate.

Yes, some jobs require applying online and require you to be a member of a WhatsApp group for staff

Yes. Networking events have been progressing towards smartphone-friendly means of distribution in my experience, for example QR codes replacing paper pamphlets.

3.2 • Social Accessibility

Do you feel that not having a smartphone would affect your ability to be social and keep in touch with your friends and family? If yes, please explain how. - This question has ten responses with all of them stating that they feel that not having a smartphone would affect their ability to be social and keep in touch with your friends and family. Shown below are comments that are detailed enough to extrapolate more information from (ie. No simple Yes/No answers)



“Social media apps like WhatsApp, Instagram, and messenger are the only ways I contact friends and family as many don't pay for texts”

“Yes, I would be unable to use much of the communication media (WhatsApp, Instagram) that my friends and family use”

“Yes, I moved away from home and am unable to see my friends and family from there very often and I think I'd feel very homesick without my phone to keep in contact + being able to text allows me and my friends to organize events with little hassle”

“Yes, many of my friends and family and spread around the world. Without my smartphone it would be very difficult to keep in touch or at least to keep in touch regularly.”

"Apps make it possible to message other countries free of charge and access media put out by others"

"Yes. Events with friends have always been organised over text. I wouldn't see them enough in day-to-day life to keep in touch without a phone. With my family, most live at least an hour away so the phone is vital for contacting them."

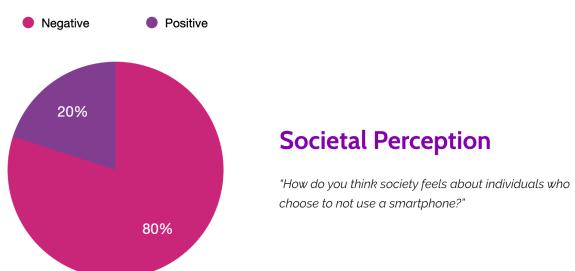
"Yes. WhatsApp is the main way I use to communicate with family and friends outside Ireland freely. Although I use the laptop app too having it on my phone is more convenient and accessible"

"Yes, find myself busy with work so being able to text or interact with friends via social media helps to keep in contact. Also to create contact with those we may have lost contact with and might not have their phone number but can search for them on social media"

"Yes. Most if not all of my friends communicate primarily through social media when we are not hanging out in person."

3.2 • Societal Perception

How do you think society feels about individuals who choose to not use a smartphone? - This question had ten responses with eight either associating them with negative connotations or suggesting that the vast majority of majority of the population would have negative connotations when discussing people without smart devices. Shown below are comments that are detailed enough to extrapolate more information from (ie. No simple Yes/No answers)



"Old, backwards, luddites or hipsters trying to make a statement"

"I think society views them as a bit of a hermit, so much of our lives, as well as basic services are online and on our phones now. I think not having a smartphone is viewed as a decision not to participate in that side of society."

"I think they're looked down on in a very unfair way, I think it's seen to be almost embarrassing and backward to not have one and I think that's something that needs to change"

"I believe that most ordinary individuals find these people impressive"

"I think it is seen and strange at first however I believe many people would come to the viewpoint of "good for you". I do, however, think it would be seen negatively to be in a professional setting without a smartphone where you can be easily contactable."

"Usually considered a luddite or making a political statement"

"They're looked on strangely and constantly questioned why they don't have one. They may also be intentionally or unintentionally shunned simply due to the extra hassle it takes to include them"

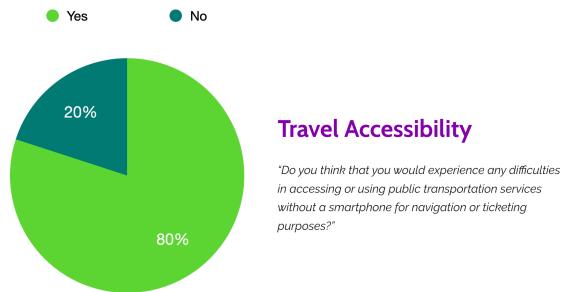
"I think they're probably seen as impressive since so many of us are legitimately addicted but also detached"

"People tend to view them as outcasts or with few friends"

"Unfortunately it is seen as something to look down on, as people who don't use smart devices are viewed as 'out of the loop' or as 'hipsters', despite how healthy one can be when avoiding social media."

3.2 • Travel Accessibility

Do you think that you would experience any difficulties in accessing or using public transportation services without a smartphone for navigation or ticketing purposes? If yes, please describe.- This questions had ten responses with eight of them stating that they think they would experience difficulties using public transportation and the remaining two stating that they wouldn't think so. Shown below are comments that are detailed enough to extrapolate more information from (ie. No simple Yes/No answers)



“Yes, public transport doesn't really adhere to a timetable so real time is the only way to know when buses will arrive”

“Yes, I use my phone for tickets for bus, rail and air travel”

“Yes, I use my phone to get directions to new places, find buses/trains that will get me to my destination and top up my leap card which I use very often on public transport”

“Yes. I pay for my street parking on an app on my phone, without this I would run the risk of having my car fined while I went to buy physical discs to go in the windshield. Most bus stops also don't have their timetables available and I am reliant on bus eireann real time on my phone to know when to expect a bus. I would find it very difficult to access a taxi without my phone if I was not in the very city centre where there are taxi bays.”

“Google maps is an essential part of transport, most public transports don't print updated maps or routes. Bonus help in foreign countries as you can't read transport info. Increase in smart tickets to reduce paper use”

"Bar the buses I take regularly, I'd find it hard to rely on a paper bus timetable. And since most of the bus stops don't have them anymore I'd have to go to the main station in the city to check them. Overall it'd just be way more awkward"

"Yes. I use the real time app and Google maps almost every time I have to make a journey. I use the leap card app to top up my leap card. I buy all my train and inter-county bus tickets through my phone"

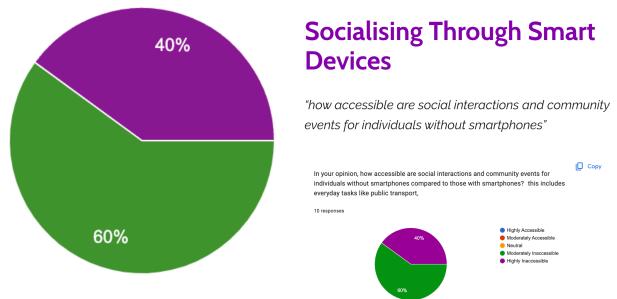
"Yes, topping up a leap card, booking train/ bus tickets, checking train/ bus times"

3.3 • Contrasting Perspectives

When beginning this project, I assumed that there would be a strong correlation between my personal experiences with giving up a smart phone and many peoples perception of me giving up a smartphone. As such, I expected the results from the survey to be an appropriate measure of the difficulty of the task. Although it is true that there is certainly disadvantages to lacking a smart device, many of the percentile skews present within the survey would appear to suggest a much more dramatic change in lifestyle.

For example the survey question featured below deliberately asks a vague question that is up to the interpretation of the user.

The question mentions social interactions and community events but these could be attributed to any activity whether its work, a hobby or time spent with family. The question continues to clarify that this includes everyday tasks such as using public transport.



Effectively this question asks the users how accessible would everyday living be if they didn't have access to a smartphone and the survey responded with 60% suggesting high inaccessibility and the remaining 40% suggest a moderate inaccessibility.

This level of inaccessibility is simply not the case at least when it is compared to the personal experience that I participated in for the duration of this project. Towards the end of the survey, a similar question was asked regarding transportation.

3.4 Travel Accessibility Reflection

"Do you think that you would experience any difficulties in accessing or using public transportation services without a smartphone for navigation or ticketing purposes?"



When asked to explain the difficulties regarding the accessibility of public transportation without a smart phone, there were continuous mentions of the requirements of the app for topping up Leapcards, the necessity of google maps for directions and the importance of the realtime app for bus timetables rather than relying on paper ones.

While it is true that all these are difficulties and are certainly aspects to consider when debating whether to discard your smart phone. It is also important to recognise that many of these difficulties are for many, minor inconveniences. As previously stated, you will eventually learn the habit of topping up Leapcards at shop, googling directions before you leave home as well as bus timetables. 100% of the surveyed users report using the internet everyday from a device that isn't their smart phone, meaning that all of these options are likely available to them. This of course isn't going to be the case for all people who discard their smart phones but it could be argued that it is a likely majority.

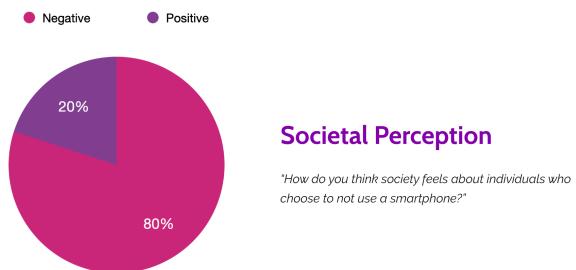
The purpose of this project was to measure how accessible modern society is without the use of a smart phone. With regards to public services and a vast majority of events and opportunities, there is certainly a moderate level of accessibility. This means that it is likely that in Cork city, there are few aspects of daily living that a person will miss out on as a result of not possessing a smart phone.

Unfortunately, just because there is a lack of hard barriers in terms of accessibility doesn't mean those barriers don't exist in other forms. Judging by the results of the survey across multiple questions and combined with this project's personal experience, there is a clear social barrier when it comes to owning or not owning a smart phone.

As seen in the prior two highlighted survey questions, there appears to be a disconnect between what the public perceive as the experience of not having a smart phone. No where is this more exemplified in the question below.

3.5 • Societal Perception Reflection

"How do you think society feels about individuals who choose to not use a smartphone?"



When prompted for reasons behind the negative connotations behind choosing not to use a smart phone, many referred to them as the following: "backwards, out of the loop, hipster, luddite or hermit."

3.6 • Thomas Theorem

Within the study of sociology, Thomas Theorem refers to idea that it is the interpretation of a situation that determines how people react to it. “If men define situations as real, they are real in their consequences”, in other words, if a society believes in a stigma then that stigma will become a reality as far as the consequences are concerned.

Within the context of this study, there is a potential exaggeration of how drastically a person’s life is altered if they choose to not have a smartphone. Whether its the belief that public transportation may be near impossible to navigate without a smartphone or the idea that social events are moderately or even highly inaccessible without a smartphone, there appears to be an underlying social belief that living without access to smartphone is impossible for most.

As a result, a large percentage of those who live without a smartphone, are likely going to have to endure those stereotypes and those who continue to make the choice of going smartphone-less, are inevitably more likely to fall into social groups with other like minded people, potentially fulfilling aforementioned stereotypes of being out of the loop as they rely less and less on people with smartphones for news and events.

3.7 • Creation of a Digital Artefact

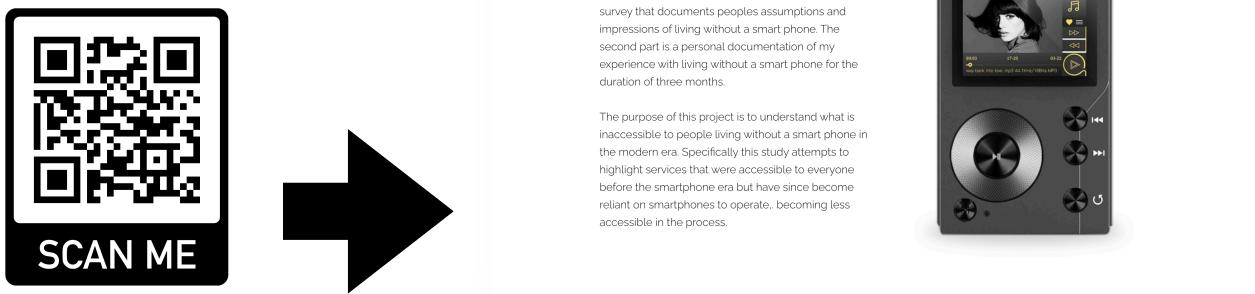
Once I had my dataset from my personal experiences and my dataset from my surveys, I could begin creating the final piece of my digital artefact. This involved creating a Wordpress website to present and share my results easily with others. Although I knew what kind of data I was presenting, it was important to make the website look visually interesting while also being easy to read and understand to those unfamiliar to the project.

I used my Wordpress account which I had set up in my first year of digital humanities to host the website, starting on a blank canvas, I drew inspiration from a fitting source given the topic of this project: the original marketing campaign for the iPhone and the iPhone3G. This was the place perfect to draw from as not only was it recognisable and appropriate to the topic of smart devices but it is also intended to be minimalist and easy to read, making it good not only for a marketing campaign but also the website. Additionally, because my project heavily involved discussing the pre smartphone era, its a fitting aesthetic to have

my website draw inspiration from that era's design, with the original iPhone marking the beginning of the smart phone era. Below I've attached a screenshot from my website (left) as well as a screenshot of iPhone 3GS marketing material for visual comparison.



Upon the website are the statistics and datasets that are present within this report as well with my accompanying perspectives. In order to access the website, please visit the domain <https://maxwellcallanan.com> or scan the QR code below.



4.0 • CONCLUSION

In conclusion, this study has focused on identifying how accessible modern day society is to people without smartphones. This is important as the negative side effects of smart phones have been widely documented over the past decade and as such, there is a necessity to not build a society around a device that could cause harm to those who use it.

In essence, what this study wanted to discover were aspects of day to day life that were no longer accessible as a result of unnecessary smartphone implementation and dependency, making something that was previously accessible to everyone, only accessible to those with smartphones. A smaller scale example would have been the mass adoption of QR code menus at restaurants, these became incredibly popular during the COVID-19 pandemic but appeared to have been largely discontinued.

Instead what this project potentially uncovered else was potential a stigma against those who decide not to use a smartphone. This was felt during the project as well as whenever there would be a person reaching out to message over social media, there would inevitably be a long delay between their message and a response. Oftentimes there was never a response, with situations instead rectifying themselves before there was an opportunity to check my messages on my laptop at home.

The potential findings of this research project although bleak are none the less useful. In speculating that the primary issues with not possessing a smartphone are social inaccessibilities rather than physical inaccessibilities, that means that social antidotes can be potentially supplemented in an effort to sway people away from smart phones in the future. In essence, by building societies that have the ability to support each other at a local level with close communities and regular social events, there may be plausible methods of dissuading social stigma surrounding not owning a smartphone and prevent potential hard accessibility barriers from rising in the future.

5.0 • FUTURE WORK

With regards to future work, there are many aspects of this project that I would like to improve upon. The planning stage of this project was troubled with issues determining whether or not the project was viable to begin with. Even with regards to pitching the project, it was difficult to conclude what I was definitively measuring by either giving up my personal smartphone or by asking others about their perceived accessibility issues that come with forgoing smartphones. As with parts of this report's "Introduction" section and "Background & Related Work" section, the graph below originates from my digital project plan for this Final Year Project.

	September 2023	October 2023	November 2023	December 2023	January 2024	February 2024	March 2024	April 2024
Research and Development								
Personal Data Collection								
Surveyed Data Collection								
Data Analysis								
Website Development & Revisions								

Graph Key

Research and Development

This refers to all processes involved in understanding and defining my project.

Including finding reliable sources to base my data around, planning out the function of my data and its potential uses as well as projecting what potential issues I may have in the future.

Personal Data Collection

This refers to my own personal experiences with going smartphone-less and the various issues / advantages that come along with it. I am chronicling my accessibility issues and allowing them to inform the makeup of the next section of the project.

Surveyed Data Collection

This refers to conducting a survey and asking people questions about their phone use and potential accessibility issues that they might have with going smartphone-less. I will be using my own experiences to dictate what kinds of questions I will be asking them, in conjunction with general accessibility queries. I will also be asking participants if they would attempt to go smartphone-less for a period of time however I likely will not get any participants taking me up on that offer, I will instead be querying as to why they wouldn't give up their device and comparing the reasons offered to the other questions they have answered in order to hope develop a consistent idea of why the general public feel like they need to have smartphones all of the time.

Data Analysis

This refers to my findings after I've compared my own experiences to that of my surveys. Involving graphing and organising data in a way that it can be easily understood and cited.

Website and Development Revision

This refers to the act of developing a website of where to put my findings, ensuring that it is easy to navigate and understand. There will also be the objective of allowing the website to ask users to contribute to new datasets concerning going smartphone-less and documenting the issues that come with it.

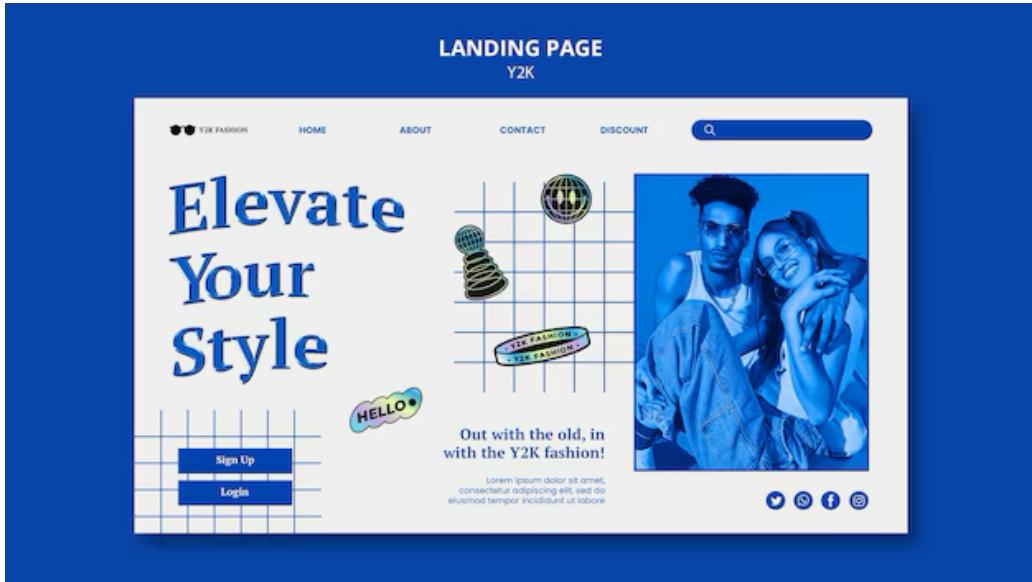
As shown above within the graph, an overwhelming majority of allotted time was dedicated to research and development of the project. With that being said however, the time that was spent during research and development was often spent remising over decisions and rethinking the projects intended purpose. There were constant ideas to reformat the project into something more familiar when discussing smartphones and dependency.

Perhaps it would have made a better project to focus on something that was already well known such as social media addiction and expand on it in my own terms. It would have certainly made pitching the idea easier as it would have been a familiar concept, there would also likely have been far more sources from which this project could cite. As of now, there is little in the way of similar projects with regards to accessibility which made the process of completing this project incredibly difficult even if this project didn't have me acquire its own personal datasets.

If this project had a bigger scope or timeframe, I think that ultimately it would be a website or a social media movement that attempted to lessen the stigma surrounding people without smartphones. This could take the form of a marketing campaign, website and influencers to effectively make it trendier to disregard the smart phone. In recent years similar projects have began to pop up with celebrity backing. Most notably the product category of "dumb phones" have seen a rise in popularity with backers such as Kendrick Lamar promoting them to young people today. "It is marketed as "just a phone", and a less distracting alternative to other modern designs – part of the trend that sees more mainstream support for "dumb phones", which are less smart and more practical devices." (Mouriquand, 2023) Effectively these devices are more similar to pre smart phone era phones, with some featuring physical keyboards and simple user interfaces. Such a trend isn't local to American culture either with even the Irish Examiner pushing for the use of dumb phones in todays world "I swapped my smart phone for a 'dumb' phone — and I'm so glad I did" (O'Shea, 2023)

The website for such an expansive version of this final year project could be much more fully featured with the ability for others who give up their smartphone to document their experiences. This was something that was initially planned for this version of the project however it didn't seem feasible to convince people for an undergraduate final year project, to give up their smart phones for a period of time. With more of a marketing campaign surrounding something like this with influential backers, it could become feasible on a wider scale. The website itself could be a social platform, in essence a substitute for Instagram or Facebook where people without smartphones can interact and share their experiences. It could be much more akin to early Facebook or MySpace, lacking a strong algorithm that attempts to retain the users attention. From a design perspective, it could be interesting to see more a Y2K aesthetic come back for a project like this.

See image below for example, sourced from Freepik, https://www.freepik.com/free-psd/flat-design-y2k-template_42036308.htm



In essence, if I were to change anything about the project knowing what I know now, it would be to change the purpose and form of the project. In essence, this project is a form of measurement and study with datasets and perspectives that are useful for academia. However a project like this could help people instead of only being used for research and speculation. A reworked version of this project could see a website with social interaction at its core without the continual reliance on smartphones as its hook. Social events have been planned around concepts like this and as previously stated, influencers and general media are turning to smartphone alternatives more often in recent years.

There is a clear desire to not be dependent on smart devices within day to day living. Through a strong marketing campaign, social webspace and potential local influence, this project could have been more social then sociological in nature and in doing so, would become more of a service rather than an academic piece. This however, I feel would have been a better outcome for a project covering smart phone dependency. Instead of asking whether we are overly dependant on smart devices or even if its possible to disregard them in day to day living, a vast majority of the public already understand that smartphones are invasive with potentially addictive software.

In a practical sense, it could have been a more helpful project if instead of measuring smart phone dependency and reflecting upon it, to create a service that lets people manage their own smart phone dependency, granting them the tools and local community to help themselves and help each other.

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Digital Artefact

Featured below is the link to the digital artefact for this final year project, a Wordpress displaying the datasets and experiences developed while creating this project.

maxwellcallanan.com

Maxwell Callanan

Smart Phone Dependency



Welcome

Over the course of the academic year, this project investigated how dependant modern society has become on smart phones and questions if it is feasible to give up a smart phone in the modern world.

This website contains documentation of personal experiences as well as surveyed perspectives, each with their own respecting datasets, enabling interpretation of consistent measurements and the ability to extrapolate core findings.