Seniors and the Digital Society.

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Seniors' relationship with the Digital Society.

Many of the fast-growing electronic services can be considered as almost tailor-made for seniors:

- You do not have the requirement to physically go to a certain place to have the service performed
- There is also no need to adapt to certain times and opening hours
- There is also no queue of hurried people behind you that makes you feel stressed.

However, new knowledge is needed to be able to make use of these new digital services, which are increasing, while the non-digital services are decreasing. For example, more and more shops and banks are no longer accepting banknotes as a means of payment.

The following thoughts on the new digital services and the knowledge requirements that come with them are based on services, related to everyday life. Seniors who have more advanced needs, write documents, create calculations, organize files, create directories, etc., can then attend training courses on personal computer management.

1 What can make seniors feel left out of the digital society?

- The knowledge of how to handle cash becomes obsolete¹
- You can't identify yourself in many situations.
- Not used to Cash-free facilities
- Limited understanding of what the term "social media" means.
- Can't handle all forms of electronic communication.
- The digital society in many cases requires both good vision and manual skill.
- Society is increasingly moving towards self-service.
- You can no longer take pictures as before.
- Encyclopaedias are quickly getting old
- You can't watch TV or radio programs and shows that have been broadcast in past time.
- Difficulty managing your personal finances with e-banking.
- Buying tickets for travel and events means use of electronic procedures

2 What skills do seniors need to feel less outside?

If you try to list which knowledge is very or less important, you can make an assumption of the consequences. At present, knowledge of how to use a digital ID must be considered the key to many services. Without this knowledge, you are left out of much of the digital society. Nor does it have to be entirely unfamiliarity that causes this exclusion. This could be, for example, distrust of security or the fact that you feel that you are putting yourself at unacceptable risk.

Further down in the document² there is an attempt at assess impact of knowledge vs unfamiliarity in some areas

¹ At least in Sweden

² Impact assessment of being able or unable, page 8

2.1 Basic knowledge

2.1.1 How to acquire the necessary physical aids (mobile, tablet, computer, printer, ChromCast, etc).

Where do you go and what do you say you want?³

2.1.2 Be able to identify yourself electronically

How to get an electronic ID like BankID in Sweden? Should you have it on your phone, tablet, or other place?

Identification with and without QR code

2.1.3 Be able to install Apps

What is an App? Is there alternative for an App?

Do you need apps for everything? Maybe for things you do often.

2.1.4 Chat with a "Helpdesk"

"Chatting" means exchanging messages with someone or "operator" at, for example, an airline's "service/helpdesk". This means, for example, that the operator can simultaneously serve several customers and does not have to sit idle, while the customer picks up various tasks that are needed. One advantage for the customer is that you don't need to experience a time pressure to retrieve a requested information such as invoice number, order number or other references.

It may be easier for the customer to call a phone number directly, but sometimes that cannot be done. When, for example, an airline don't offer "chatting" at all, the result that may be ending up in time endless phone queues.

2.1.5 Voice control for certain functions

Voice control⁴ is expected by many to grow quickly. Even today, you can get a mobile to do more things than most users take advantage of. If your hands are busy with other things (driving a car, household duties) or simply don't obey ones fingers (tremors or stiffness, for example), voice control is an option.

For those who learn to use voice control, great opportunities will open up.

Examples of things that can be controlled by voice today:

- Email (Mail)
- Messages (SMS)
- Search for information (for example Google)

³ It can also be such things as "Security", virus protection, "safe surf", etc.

⁴ For example, "Siri"

2.1.6 Be able to manage an electronic phone book

It is important to know enough about the possibilities of the electronic option before deciding to keep, discard or have both physical⁵ and electronic options.

2.2 Common and everyday services in the digital society

2.2.1 Understand cash-free payment methods

- NFC (near field communication) is used to enable wireless communication between a Credit card and a Cashier Terminal. One must know what to do for preparation (Amount limits, security)?
- Swish (financial transaction between mobile phones. One must have knowledge of what do you need to do for preparation (Amount limits, security, and risks, use of QR code)?
- Pay to specific accounts (like PayPal and others)

2.2.2 E-banking

Skills needed:

- How to log in.
- How to set up beneficiaries.
- Be able to handle social security numbers (in Sweden) with both 10 and 12 digits.
- Know why you sign payments and how to do it in practice.

There may also be special requirements for the equipment you have.

2.2.3 E-commerce

Knowledge of concepts such as "Cart", "Go to checkout", "Complete purchase", "Sort of Payment".

2.2.3.1 Card payment

Knowledge of

- Credit card or Debit card? Risks and benefits of these two options.
- CVV code, validity format.

2.2.3.2 Banktransfer

Awareness that you are sometimes transferred to your own bank's payment function and then back again.

⁵ Conventional paper phone book

2.2.3.3 Swish – send and receive money with mobile

Mental readiness to transfer to the Swish app and then the BankId app

2.2.3.4 Invoicing

- PayPal or similar.
- Billing fees?
- Awareness that you then receive a "regular" invoice
- E-invoices

2.2.4 Pay parking fee

Knowledge about

- Apps for this
- The term "Area Code"
- Change in parking time (longer or shorter).

2.2.5 Find information /

Know how to "Google", without messing with it too much.

2.2.6 Read your medical record

Knowledge about various features:

- How to book/order time for a doctor's visit
- Read notes
- Lab results. Discrete values and graphs.
- How to know who "accessed the Medical Record" (log list)

2.3 Common and everyday services that still have good other options (so far)

2.3.1 Know how to use web-based TV and radio

By knowing how to use those features you get:

- Watching TV shows on your own TV regardless of airtime⁶
- Easy to find interesting programs.
- Watching videos from YouTube on your own TV

⁶ Using, for example, Chrome Cast, Apple TVs, or built-in features of latest-generation TV

2.3.2 Purchase tickets ⁷

You must know both how to purchase the ticket and later how to show the ticket⁸? If you don't trust your own ability for the latter, you need a paper backup with of course is an extra effort.

Today there is differences between travel operators (e.g., SJ, UL, SL in Sweden)

2.3.3 Be able to manage an electronic calendar

To know enough about the possibilities of the electronic option before deciding to keep, discard or in parallel have a physical calendar.

2.3.4 Play and listen to Music

- Knowledge of CD collection versus, for example, Spotify's playlists
- Bluetooth

2.3.5 Photographing

- Knowledge of the pros and cons of mobile camera and conventional camera
- How to get pictures for the TV⁹
- Backup

2.3.6 Social media

Knowledge of them. Like Instagram, Facebook, Twitter etc.

3 The reasons for not wanting to belong or be included in the digital society

You have a perception that your necessary input is substantially higher that what you gain

You believe that the remaining life to short to make such an effort

You have the opinion that it is too difficult to learn and that you don't have capacity and/or motivation.

Concerns:

- About the consequences of digital tracks
- About electromagnetic radiation
- About technology is taking over the human aspects of life
- About being cheated by both organisations and individuals

⁷ Via Browser or App from the carrier

⁸ For example, stored in "Wallet"

⁹ Via Chromecast or Apple-TV

3.1 You don't want to

- You don't like being forced
- Too much technology results an unhealthy social development
- You get discouraged by those who most of the time stare down at their phone.
- In general, this society doesn't consider the elderly

3.2 It is considered that it is too difficult to adapt to the digital society

- It has been tried and it seems too complex
- You have not tried but still consider it too difficult
- You have medical reasons that inhibit to try
- You do not have the discipline/interest to acquire the necessary skills.

3.3 Personal financing is not enough to buy equipment.

Money spending is mostly an assessment what you "get out of the financial input". If it is very little benefits, it logical to express "I don't have the money.

4 Impact assessment of being able or unable to

4.1 Basic knowledge

4.1.1 How to acquire the necessary aids (mobile, tablet, computer, printer, ChromCast, stypes, etc).

Where do you go and how do you express what you want?

Of course, you need technical aids to be able to assimilate the Digital Society services. It is not easy, and you may need help with this. The person who helps you must both master the market and understand the person who wants the advice. A serious point of sale can be a solution, but how do you find it and dare you trust them?

It is not only a question of what to acquire, but perhaps also what has served out your role from what you already have in your possession. If there is something that needs to be dismantled, you may need to save information such as documents, calculations, pictures, etc.

Anyone who does not carry out such a review of their means, himself or with the help of an advisor, risks entering an exclusion from the Digital Society.

4.1.2 Enable to show who you are digitally

One of the most important prerequisites for digital services is to be able to tell who you are. The most well-known feature for electronic ID in Sweden is "BankID", but even "Feja e-ID" comes strong. More and more players are using this electronic way of identifying customers. This makes it a

prerequisite for using their functions. Electronic ID are widely used accepted as a reasonably secure identification. "Feja e-ID" can also being used to identify yourself in a personal/physical situation (e.g., collecting a parcel from a delivering organisation such as Post office, UPS, DHL, etc.

Anyone who cannot or doesn't want to use for electronic ID will therefore be excluded from many services in the digital society.

How to get an electronic ID? Should you have it on your phone, tablet, or other place?

Identification can be done with and without use of QR code.

4.1.3 Apps to download and use

What is an app? Are there options for the app?

Do you need apps for everything? Maybe for things you do often.

Most digital services can today be accessed and used using a standard web browser. Such services as you use frequently (e.g., buying a train ticket) can justify downloading the service's App, which can make its use more efficient and easier.

If you do not master to download an App, there are no consequences other than that you can ask someone knowledgeable for advice how to do it. The download of the app is some kind of one-off for the service in question.

4.1.4 Chat with a "Helpdesk"

The consequences at present if you do not master "chat", are limited. If it is perceived by those who provide services as more effective than other means of communication, "chat communication" will become more important. It may be that at certain times, "chat" is the only form of communication. This means, of course, that the consequences will be greater for those who cannot but depend on that communication.

4.1.5 Voice control for certain functions

Voice control is something that can be used if your hands are busy with other things or simply do not obey one's will.

For those who learn to use voice control, great opportunities are to come.

For those who want to manually but cannot manoeuvre their tablet or phone and cannot or don't want to use voice control, has the consequence that other more complex aids need to be used for those who want access to the digital world.

4.1.6 Be able to manage an electronic phone book

Switching to a digital phone book is usually easier than switching to electronic calendar. One explanation is that messaging (SMS) and phone calling becomes so much easier with the electronic variant of phone book because it is usually integrated with SMS and phone functions. In addition, you can combine with door codes and other necessity in an everything with permanently locked world of entrance doors. Some integration to search services such as hitta.se also makes it easier.

Not being able to use the digital phone book if you have a smartphone makes it more difficult to call, text and send mail than it needs to be.

4.2 Common and everyday services in the digital society

4.2.1 Cash-free payment methods

Those who do not want or cannot make use of card payments can of course avoid those service establishments that only accept cash-free payments. This should not be a major break in everyday life. However, small money transactions between private individuals are starting to become more difficult to do with cash. The recipient of money is often reluctant to accept cash because it involves cash handling with coins and banknotes that more and more people are trying to get away from. This becomes especially clear today when *Swish* (in Sweden) has had such a big impact.

When buying goods online, the payment is sometimes handled by a company that provides payment solutions for the e-commerce industry (e.g. *Klarna* in Sweden or PayPal). The payment can be made by card, direct transfer from bank, linked bank account or invoice (which sometimes incurs additional fees). The fact that there exist different payment methods results in no major negative consequences for those who don't want to pay "online"

4.2.2 e-banking

If you want to buy or sell online, this is still the one who acquires the knowledge to manage an online bank gets many advantages. If you choose the paper options for e.g., bank statements, you must pay for this. Likewise, for those who choose to pay their bills by invoice, will have to pay for the bank's services. Increasingly sparse between bank branches also makes it difficult for those who personally want to pay at the bank.

Some things about banking services are of a one-time nature. E.g., connection of electronic ID (BankID), setup of payees, creation of sub-accounts. These actions need to be made only once and maybe one can ask more skilled friend or another person you trust and can consult.

4.2.3 E-commerce

This happens when you want to buy or sell online instead of physically going to a store. This may not happen more often than being able to get help from someone else when needed.

4.2.4 Card payment

Since card payment is an important link in the chain between goods and service providers, it becomes a kind of function between cash payment and invoice payment. An advantage for the customer is that there will be no additional cost that invoicing often requires. The customer also doesn't need to prepare for the purchase by making sure to have cash available. In addition, card payment is such a powerful means of payment, that in many individuals have a concern about what might happen if the card gets off. In recent years, the increasing use of card payment has had

consequences for those who do not use that form of payment. Cash-free trading is simply becoming more common.

Credit card or debit card? Since it can be perceived that the debit card enables total availability to the bank account the card is linked to, some prefer credit cards.

4.2.5 Bank transferring

Digital purchases of goods and services sometimes mean that you are suddenly moved to your own bank's web. Once there, you are expected to log in and continue the purchase in the way as you normally pay invoices. Those who feel uncomfortable with this can usually choose other payment methods such as invoice and usually don't have any negative consequences.

4.2.6 "Swish" - Money transferring between smart phones

This payment method began as the payment of small sums within the circle of friends and family. It has grown into a means of payment for small traders (market shops, cafés in association premises, etc.). Among these, demands for cash freedom are great. This has an impact on customers who don't use this payment service.

4.2.7 Invoicing

PayPal or similar. Billing fees?

You may have awareness that you then receive a "regular" invoice

The word "*Invoice*" triggers the thoughts of a billing fee. However, some invoices are electronic (Einvoice, SMS or email) and do not incur any special cost of postage or handling for the supplier. Those who do not want to choose the billing option usually have other payment options to choose from

4.2.8 Pay a parking fee

Anyone who chooses to park the vehicle and pay digitally, basically has two ways to choose from. Either to download an App or park by sending an SMS at the start and stop of the parking time. The advantages are that you do not have to have cash or cards available and that you do not have the problem of estimating the length of parking time. You also don't have to keep track of tickets, or queue at a vending machine. Many people may have difficulty providing social security numbers e.g. and prefer the "old way" of parking!

4.2.9 Search for information

"Googling" has become a fierce competitor to the encyclopaedias. The speed, the number of answers and the fact that you can ask your question in plain language, are obvious advantages. The encyclopaedia's proponents highlight the previous fact-checking of serious encyclopaedias before the books are printed.

The immediate consequence for those who don't use digital search can lose some speed and that the "latest" is not included.

4.2.10 Consult your Medical Record online

Even if you know that the service exists, there are three reasons to still not take part of your medical record (except that, you are healthy):

- 1. You abstain because you find it/can be uncomfortable to read
- 2. There is no need for additional information beyond the one you receive directly from the health care system
- 3. You do not master the technique

If this is only the third option, one consequence may be that, for example, one did not understand/remember what the doctor conveyed for information. In turn, this can lead to not following advice and certain approaches in daily life

Not being able to navigate a complex healthcare organization using the digital aids available can mean unnecessary time-space or additional work for healthcare professionals.

4.3 Common and everyday services that still have good options (so far)

4.3.1 Master Chrome Cast and similar.

Since many programs have reruns advertised in newspapers' TV and radio schedules, ignorance in this area does not have such great negative consequences provided that you can dispose of your own time.

4.3.2 Buying tickets

Buying tickets manually, today means increasing difficulties. The closest way in purely manual way are are vending machines. For more complicated tickets for holidays and longer trips, there are still traditional travel agencies. For those who lack opportunities, there is today an opportunity to let someone else help with the purchase.

4.3.3 Be able to manage an electronic calendar

Many people who have good knowledge of digital services still choose to have a traditional calendar. For individuals who don't use a digital calendar today, it have only limited negative consequences.

4.3.4 Play and listen to Music

For those who are satisfied going to concerts, listen to music on the radio or play their own CD collection, there are no major negative consequences.

4.3.5 Photographing

For those who do not miss the mobile camera's ability to document, transmit and huge storage capacity, the consequences will be small. Then, of course, there's a question of what happens to "regular" photography.

4.3.6 Social media

For those who do not use social media due to insufficient skills, privacy reasons or other fundamental objections, this has certain consequences. One consequence is to sometimes be outside a world that "most" are expected to belong to. You may not know about someone's birth or death, no invitation to things that might be worth participating in. How to value this is highly individual.