Digital Library Behavior

DIGITAL LIBRARY BEHAVIOR

Devised by Moos-Bjerre & Lange for the Danish Think Tank – Libraries of the Future with the support from The Agency for Culture and Palaces' grant "Development Resources for National Public Library Purposes"

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This is a non-official translation of the Danish report "Digitale Bibliotekstrategier". The report have been translated into English due to high demand. We take reservations for any linguistic errors.

0. PREFACE

The use of digital cultural services has increased dramatically in recent years. Netflix and Spotify have become the rule rather than the exception, and the digital possibilities change our behavior and approach to the culture. There has occurred a completely new need for access and accessibility – where everything must be accessible regardless of time and place. The libraries are constantly developing digital services that ensure a broad digital offering to the citizens. The use of the digital library has grown steadily, and especially the digital book lending has recently contributed to ensure an increase in total book lending.

Despite these services and increases in digital lending, there is still unprecedented potential in the library's digital offering. Both in relation to expand existing offers, create new and make the deals visible and accessible to more. Today, there is a lack of knowledge about citizens' digital behavior, demand and needs, which can translate into local digital development strategies, and thereby contributing to a better match between digital libraries and citizens' competencies and needs. Therefore, the Danish Think Tank – Libraries of the Future have initiated this study.

The report is a survey of citizens' digital library habits: How do the citizens use the library's digital offers, what challenges their use and what supports the digital offers in the local area? The report provides both insight into modern digital trends and serves as a tool for libraries to develop the digital course.

Finally, the study is an important contribution to the academic and political debate about the role of libraries in the society and to whom they should address. The study demonstrates that the libraries contain many digital potentials, both in terms of expanding existing offers, creating new and making the offers available in new contexts. The digital libraries may potentially refer to users who do not use the physical library, as well as create additional relevant offers for those citizens who are already accustomed library users.

The statistical survey underlying this report was conducted by Moos-Bjerre & Lange. Prior to the statistical work is a qualitative preliminary study conducted by the anthropological consultancy Actant. This is online in Danish at www.fremtidensbibliotek.dk. The project is supported by The Agency for Culture and Palaces "Development Resources for National Public Library Purposes". The Danish Think Tank – Libraries of the Future wishes to thank project participants from the six key libraries and DDB for their efforts and constructive contributions to the study. In addition, special thanks to Sebastian Borum Olsen | KL7, Tine Jørgensen | BF, Louise Springborg | SMK, Boris Zetterlund | Axiell Group and Lennart Björneborn | IVA / KU for interview input.

We hope that the diversity of knowledge that contributes to the study will be used both internally in the library world and externally as a starting point for an important debate on the future of public libraries – a combined library where the physical and digital support each other.

Enjoy the reading!

Lotte Hviid Dhyrbye, Head of the Danish Think Tank – Libraries of the Future

Content

1. Introduction

Digital library services play an increasing role in the use of public libraries in Denmark. When you ask the Danish citizens, there is no doubt that the library still is primarily associated with physical book lending, but nevertheless there are glaring signals of development in the use and perception of public libraries. In 2016, the library is not only a place to attend physically, but also something you can use at home from the couch, at the desk or on the way in the train. Digital library offers have developed a lot in recent years, and the digital services are increasingly a more important part of the public libraries.

Many library employees and others who work with it have built up a comprehensive experience-based knowledge of who uses which offers as well as how best to convey the latest offers. Nevertheless, more systematic knowledge about the citizens' use and orientation in relation to digital offers is lacking. This project seeks to address this shortcoming and contribute with such systematic knowledge that can form a knowledge base for future development and the efforts of local libraries to meet its users and the citizens of the municipality in general. Libraries must also relate to new commercial cultural services. In many ways, commercial services with music or film streaming and online audiobooks offers similar services to the libraries digital services. This project therefore also seeks to relate to these services and to investigate what services the citizens use.

The project reflects a factual and knowledge-based approach to working with local digital strategies. Work is done based on a target group approach, which aims to identify and describe relevant target groups. This is done through a segmentation that sets up eight relevant segments, which each is an expression of the use of the digital library. Furthermore, an additional division of municipalities is added to a number of types with certain common features.

As an example of a connection that the project seeks to investigate, the importance of general IT habits and comfort for the use of digital library offers can be emphasized – is the very digital citizens the ones who use the most digital services? Or does the service have a broader affection? The answer is, as you can read on the following pages, both yes and no. It is far from the most IT experienced who use the most digital services. At the same time, however, there are a group of very little digital citizens who do not at all use the digital services, probably because of their lack of IT qualifications or lack of interest in the digital.

Similarly, the project seeks to investigate the importance of distance to the physical library. Are those who live far away from the physical library, making the most of the opportunity to go to the library from home without having to spend whole or half hours going to the library? The answer is, as you can also read on the following pages, largely yes. Long distance to nearest physical library leads to higher use of the digital library. However, only if it is taking into consideration that frequent use of the physical library also leads to frequent use of the digital library, and that the distance to the nearest library has the reverse effect for physical library usage.

The basis for the study is a questionnaire survey among 7,205 Danes. There are several things worth noting in relation to the survey methodology. Firstly, the survey is a citizens survey – rather than a user survey – and gives a picture of how the Danes generally use the digital library. The advantage of such a survey is, of course, that you get a more holistic image by asking broader than, for example, asking the current users of the library. Secondly, the study indicates a quantitative statistical approach to library usage. As you can see, it contains a relatively substantial number of respondents and shows analyzes of these, which provides a

basis for solid knowledge. At the same time, there are boxes that provide perspectives from experts and from qualitative interviews from the qualitative feasibility study.

Reading guide

- **Section 2. Conclusion** is a summary of the entire report's content and findings. It gives an overview of the main points in the report. Here each section in the report is sum up

- **Section 3. Cross-cutting analysis of citizens' use of the digital library** looks at the use of the digital library across audiences and seeks to say something generally about the coherence of the Danes' use of the digital library. An overall model is being presented, to highlight what matters most in the frequency of use of the digital library

- **Section 4. Segmentation of citizens** presents the segment analysis and the eight segments

- **Section 5. Segments use of the digital library offers** presents a range of key indicators regarding their usage patterns, such as primary purposes, where one has been inspired, etc.

- **Section 6. Library users' assessment and expectations to the digital services** are more in-depth with a range of evaluative aspects of libraries digital services. Here, among other things, the wishes of the segments are highlighted for a good digital service, which limits the segments of further use as well as the segments 'assessment of the libraries' dissemination of digital offers

- **Section 7. Demand for digital and physical library offers** examines the relationship between the digital and physical libraries according to the segments

- **Section 8. Summary and recommendations to work with the segments** summarize the findings in sections 4 to 7 and provide a range of recommendations for what could be considered in a concrete strategy to work with the segments

- **Section 9. Library use in different municipalities** introduces an additional analytical layer of geographic division into municipality types

2. Conclusion

Generally speaking, there is a high demand for libraries digital offers, and libraries have a great potential in expanding these both in terms of developing offers and in the communication to and with the citizen.

To some degree, citizens are supporting the development of the libraries are prioritizing to improve the digital library at the expense of the physical, but at the same time they believe that the physical library must pass. At the same time, knowledge of the specific library services is relatively limited, and there is a large group of users who are not digitally oriented and not interested in the digital library offers.

2.1. THE TOTAL USE OF THE DIGITAL LIBRARY

Overall, 46 % of the citizens use the digital library more than once a year, and are thereby defined as users in this report. One can discuss whether the assumption that a person who uses the library half-yearly can be termed a user. Here, however, it is considered that a person who uses the library once every 6 month has a regularity in his library use, which makes him / her build a knowledge of the library and thus can be termed a user. This definition is in line with the usage concept that is often used in similar studies: Whether or not the library has been used in the past year. Same definition is used as the definition of citizens who active rent books at the library in library statistics.

Figure 1: **How often do you use / are you expected to use the Danish public library digitally?**
(Books, films, music or inspiration via the internet)?
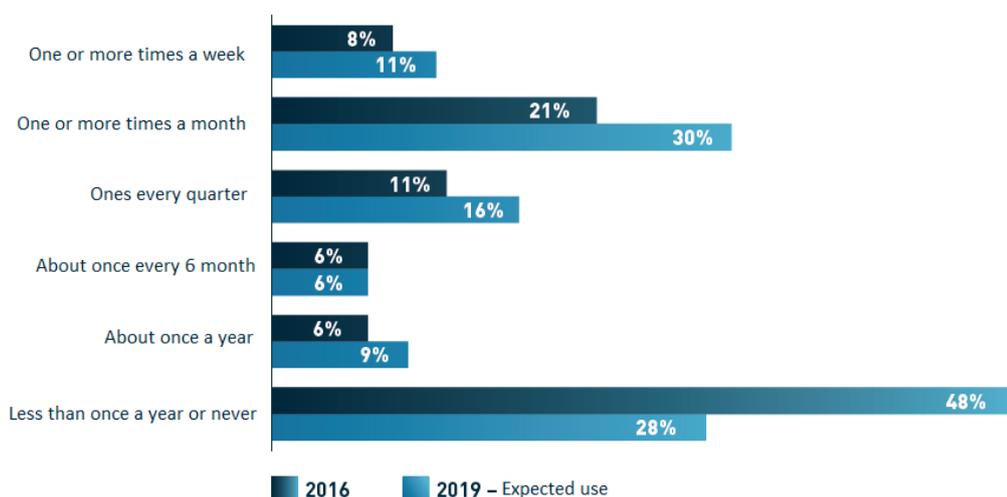
2.2. THERE IS A POTENTIAL IN THE DEVELOPMENT OF KNOWLEDGE – E.G. VIA SOCIAL MEDIA

About 19 % of the citizens indicates that **digital library loans** are among the library services that interest them the most. Among the digital offers, many citizens also like **streaming movies** as well as loans for

online audio books. **Knowledge of the digital library services** varies among the citizens, but the most well-known of the library's services are:

- bibliotek.dk
- Filmstriben
- eReolen[1]

What especially **limits** people's use of the library's digital services is lacking knowledge of the digital offers. In addition, there are many who find that a laborious and cumbersome log-in is a limitation.

Over a wide range, most citizens have been **inspired to use** the services through the library's website. Friends and family, however, are also an important source of inspiration for many as well as the library staff. Very few users have been inspired to use the library's digital services via Facebook, despite the fact that 80 % of users are on Facebook. Thus, there is great potential in inspiring users via Facebook.

2.3. THE GOOD DIGITAL CULTURAL SERVICE AND THE ROLE OF THE STAFF

The most important things that citizens emphasize regarding a good cultural service are, by comparison, user-friendly service and a good overview of the content of the service. Next, the most important for many is a wide selection. The survey shows that **the library staff** play a role in the use of the digital library. Many citizens find that the library staff are good at communicating the library's digital offers, and that it is easy to get guidance on the use of digital offers. In addition, there is also some interest in digital library guidance.

2.4. IT EXPERIENCES INCREASE THE USE AND BAD EXPERIENCES IMPEDE

The analysis has attempted to uncover which factors are related to the use of the digital library. Knowledge of these can help the library understand why some use the library more than others as well as work targeted to get more digital offers.

What matters most to **the citizens' use** of the digital library:

- How often the citizen uses the physical library
- Age so that younger citizens use the digital library more than elder citizens
- Experience in navigating on the internet
- Knowledge of the offers
- Citizen's highest education achieved
- Gender so that women use the digital library more than men, although in some areas they are slightly less digital than men
- If you have children under 15, so that families with children use the digital library more than others
- If you have concrete bad experiences with the digital library offers

If you look at what library conditions that matter to **users' usage frequency** of the digital library, it is:

- How often you use the physical library
- Knowledge of the offers
- Interest in borrowing digital books

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[1] Bibliotek.dk is the main public library web page; Filmstriben is an online service where you can watch selected movies; eReolen is the online platform to rent digital books

- Knowledge of the eReolen and Litteratursiden.dk services[2]
- Experience with that you find what you are looking in the services
- That you have been inspired by newsletters
- If you have concrete bad experiences with the digital library offers

For several of the factors, it is relatively safe to say that these lead to higher library usage, while for others it is important to note that it is a context where you cannot say which way the effect goes.

In continuation of these general findings, it seems obvious to libraries to focus on issues such as:

1. Support for the use of digital services among groups with low IT experience
2. Preventing bad user experience among new users
3. Proliferation of broad knowledge of offers

Figure 2: The size of the segments
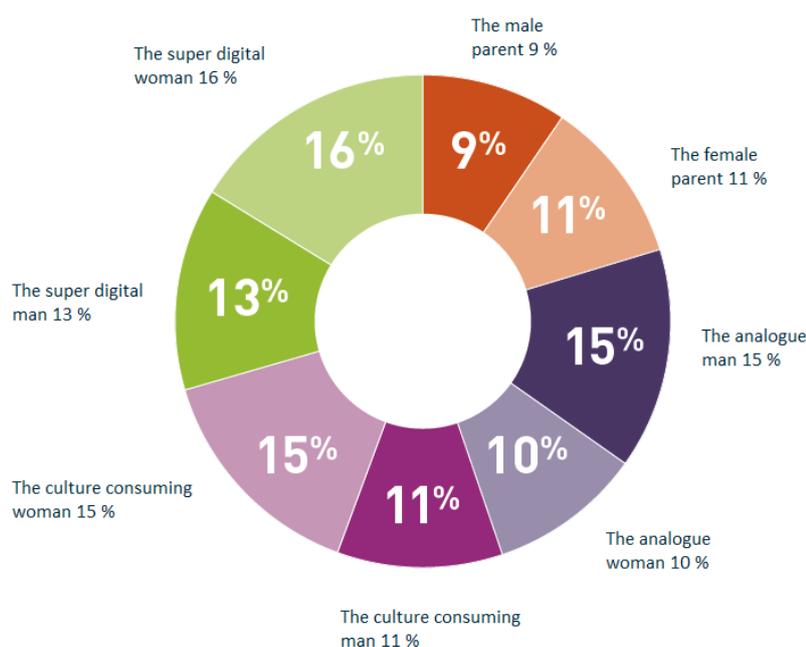
2.5. SEGMENTATION OF CITIZENS

To understand differences in the use of the digital library between citizens, a segmentation of the citizens has been implemented through a statistical cluster analysis. Citizens are thus divided into groups with a number of common features, so that these features can easily be recognized in order to work with their use of and relationships with the digital library. There are **eight distinct citizen segments** that we have chosen to name as following:

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[2] Litteratursiden.dk is an online platform that review books and give suggestions to interesting literature

- The male parent
- The female parent
- The analog man
- The analog woman
- The culture-consuming man
- The culture-consuming woman
- The super digital man
- The super digital woman

These differ from one another in several aspects: gender, age, education, digital library use, digitization, physical library use, their digital library expectations and demands, how the find inspiration, the purpose for which they use the offers, what digital cultural services they know, when they use the offers, etc. The segments comprise various aspects of the Danish population above 15 years.

2.6. THE USER HABITS OF THE SEGMENTS AND EVALUATION OF THE DIGITAL OFFERS

The vast majority of citizens state that **their primary purpose** of using the digital library is entertainment and experiences. For the super digital man and the super digital woman, knowledge and learning is also an important purpose of the digital services, and for the parent segments, child-related experiences are also an important purpose. An analytical layer that may make sense of the segments is a distinction between the **platform-conscious and the entertainment-focused users**. The entertainment-focused users would prefer specific offers and go for the service that includes them. They therefore often go for services with broad offers such as Netflix. The platform-conscious wants selection of materials and guidance and is looking for services that offer this.

It will often be more narrow services with more than commercial content such as Filmstriben. In this context, it is especially the parent segments, which are the entertainment-focused, while the culture-consuming segments appear more platform-conscious.

There is not a big difference between the segments in terms of what is perceived as **limiting for further use of the digital offers**. Over a wide range, most people find that lack of knowledge is by far the biggest obstacle. The super digital segments also experience that content and topics are not interesting enough.

If you look at what kind of digital offers that the segments could **wish more of**, there are relatively large differences between the segments. The analog segments have a greater interest in getting help for borger.dk and Digital Post than the other segments.

The female parent, the super digital woman and the culture-consuming woman are especially interested in a personal library profile that can send them suggestions and inspiration. Online games and gaming are primarily a wish of the super digital man and the male parent.

Many of the citizens believe that the **library's website** and **library staff** are good at communicating the library's digital offers. There is, however, a tendency for the segments with many older people (the analog man and woman as well as the culture-consuming man and woman) to be significantly more positive towards the dissemination. Especially the super digital man experiences the dissemination significantly poorer than the others. Likewise, many of the citizens believe that it is easy to get **personal and competent guidance** for the library's digital offers. Less citizens find that it is easy to **finds something specific when**

looking for it in the libraries digital services. In general, however, most people find what they are looking for.

2.7. THE SEGMENTS DEMAND OF DIGITAL LIBRARY OFFERS

Overall, there are major differences between citizens' demand and support for the digital library vis-à-vis the physical library. Some citizens are largely demanding a development towards **more digital library services** at the expense of the physical library. Other citizens have very little demand for such a development. This is especially the analog segments. However, there is a broad consensus across segments that **the physical library must consist** no matter what. Less than half of the citizens say that **good digital library offers reduce their need to use the physical library**. At this matter, there is a significant difference between the segments. The analog segments consider this to a very low degree, whereas the male parent, the male cultural-consumer and the super digital man are more likely to think that digital library services can replace their physical use.

The same pattern is showing in whether libraries should focus on **digital offers rather than physical libraries**. Less than half of the citizens, to a large or a certain extent, wants to prioritize the digital library at the expense of the physical. Again, it is the male parent, the culture-consuming man and the super digital man who prioritize the digital library, while the analog man and woman disagree.

The male parent is a moderately regular user of the digital library. He is very digital and frequently uses other digital cultural services. He emphasizes broad content among the services and is especially limited by his lack of knowledge of library services.

The female parent uses the digital library frequently and for several different purposes. This includes entertainment and experiences as well as child-related offers. She emphasizes broad content among the services, but is limited by cumbersome navigation.

The analog man is the segment that most rarely uses the digital library. He does not use the physical or digital library frequently, and he not very digital in his everyday life. There are many older people in this segment. The analog man significantly differs in a number of areas, from the other segments. This applies to his low knowledge of the libraries digital offers, where he hears about the offers, where he uses the digital offers and which offers he could wish more of.

The analog woman is also a rare user of the digital library. She uses the physical library a bit more frequently than her male counterpart. She is characterized by being very limited in her digital use in her everyday life, which affects her use of digital library offers. Those who use the services, they do it primarily by visiting the physical library.

The culture-consuming man is the segment with the largest share of frequent users of the digital library. He is moderately digital in his everyday life, but super digital when it comes to his library use. He has a broad knowledge of the library's digital services.

The culture-consuming woman uses both the digital and physical library relatively frequently. She uses it especially for entertainment and experiences, and prefers to use it in tablet format rather than via computer. She could wish for more offers of audio books and e-books.

The super digital man is a rather rare user of the digital library. He is relatively young and very digitally oriented in his everyday life, but to a very low degree uses the library's digital offers. He is restricted by the fact that he does not seem to think that the offers and content is interesting enough. At the same time, he is the most critical when it comes to assessment of the library's dissemination of digital offers.

The super digital woman is a frequent user of the digital library. She is relative young and uses the services for several different things. This includes entertainment and experiences, as well as knowledge and learning. She uses both the services in her spare time and in connection with study and work. She emphasizes that the digital services also have a deep selection of niche content, and she could wish for more offers of audio books and e-books.

2.8. RECOMMENDATIONS FOR WORKING WITH THE SEGMENTS

The male parent:

- An effort focusing on the dissemination of available services
- In particular, dissemination of services with wide content in entertainment and experiences
- Develop "quick" offers that e.g. can be used during transport and from a smartphone
- Focus on services with child-related content

The female parent:

- An effort focusing on the knowledge of the services
- Focus on offers must be easy to navigate in and log in to, etc.
- Focus on child-related offers
- Focus on services with broad content of audio books and e-books

The analog man:

- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and not necessarily have any desire to start using them
- Focus on offers that contain knowledge and learning
- Inspiration through local newspapers and ads

The analog woman:

- Focus on offers that are easy to navigate
- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and not necessarily have any desire to start using them
- Inspiration through contact with library staff
- Offers that inspire to the use of material you would not have found yourself

The culture-consuming man:

- Focus on spreading the knowledge of several of the services
- Focus on the development of services with more material
- Focus on services with wide content in entertainment and experiences

The culture-consuming woman:

- Focus on services suitable for the tablet format
- A focus on services that inspire to new things you would not have found yourself
- Focus on spreading the general knowledge of the services
- Develop services with more material with regard to audio books and e-books

The super digital man:

- Focus on the dissemination of knowledge about the library's digital services and their use
- Focus on services with knowledge and learning as purpose
- Focus on offers like online gaming and digital communities
- Targeted dissemination towards this group, whom is very critical of the library current dissemination of digital offers

The super digital woman:

- Focus on the dissemination of knowledge about the library's digital services and their use
- Is especially interested in services like bibliotek.dk and services with audio books and e-books, why there is good reason to communicate services aimed at these interests
- Focus on broad content services
- Development of services with more material
- Focus on services with knowledge and learning as purpose – services relevant in relation to study and work

2.9. LIBRARY RELATED MUNICIPALITIES

Based on population, population density, educational level and library expenses, loans per inhabitant and the proportion of active personal loaners in a given municipality, you can divide the municipalities of Denmark into five different library relevant municipal types. Here referred to as the municipality-type A, B, C, D and E.

The division of the segments is different in the five municipalities, why the libraries in the different municipalities therefore work differently with the segments in order to meet and accommodate different citizens. Across the municipalities there is a further tendency towards systematic differences in the use of the digital library offering. Citizens in the major provinces (municipality type C) have the highest percentage user share that uses the library once a year or more often.

Furthermore, users in the major cities (municipality type E) tend to know a bit more of the digital library services than the users in municipality type A, which are mainly the smaller municipalities.

Municipal Type A consists mainly of smaller municipalities. Here the population density and the average population are relatively low. In particular, the culture-consuming woman and the analog man are slightly overrepresented in relation to national level.

Municipal Type B mainly consists of larger rural municipalities with several city centers. In this type of municipality, the analog man, analog woman and culture-consuming woman are overrepresented more than nationally. The super digital man and woman are presented less here.

Municipal Type C mainly consists of larger provincial cities. In this type of municipality, the distribution of the segments is very similar to the distribution at national level. However, significantly less of the segment is the super digital man.

Municipal Type D consists of municipalities in the area of the capital. Segmental distribution in these municipalities does not differ significantly from the distribution at national level.

Municipal Type E consists of the major university cities: Odense, Aarhus, Aalborg and Copenhagen. These municipalities have a very large share of the super digital man and the super digital woman.

3. CROSS-CUTTING ANALYSIS OF CITIZENS' USE OF THE DIGITAL LIBRARY

This section will focus on what affects citizens' use of the digital library across segments and municipal types. That is, analyzing all the citizens and investigating what we can say about citizens' use of the digital library across a range of different boundaries and types of municipalities.

First, a number of general considerations about the use of the digital library are investigated: the overall usage frequency, the knowledge of the digital services, etc. Next, it is investigated which underlying factors that makes a difference: gender, age, education, where you live, and whether you have children. Finally, an overall model is created that allows the effects of various factors to be compared to each other.

3.1 THE USE OF THE DIGITAL LIBRARY

First, it is relevant to look at how often the citizens indicate to use the digital library overall. Here, the question has been asked how often people think they use the digital library, collected in terms of digital services as well as the libraries' websites. This figure is quite central to the remaining analyzes on which this study is based and is in itself a key figure. Figure 3 shows the response distribution of the question and the response distribution of how much the citizen expects to use the library in three years.

FIGURE 3: How often do you use / are you expecting to use the Danish public libraries digitally? (Books, movies, music or online inspiration)?

	2016	2019 – Expected use
One or more times a week	8%	11%
One or more times a month	21%	30%
Ones every quarter	11%	16%
About once every 6 month	6%	6%
About once a year	6%	9%
Less than once a year or never	48%	28%
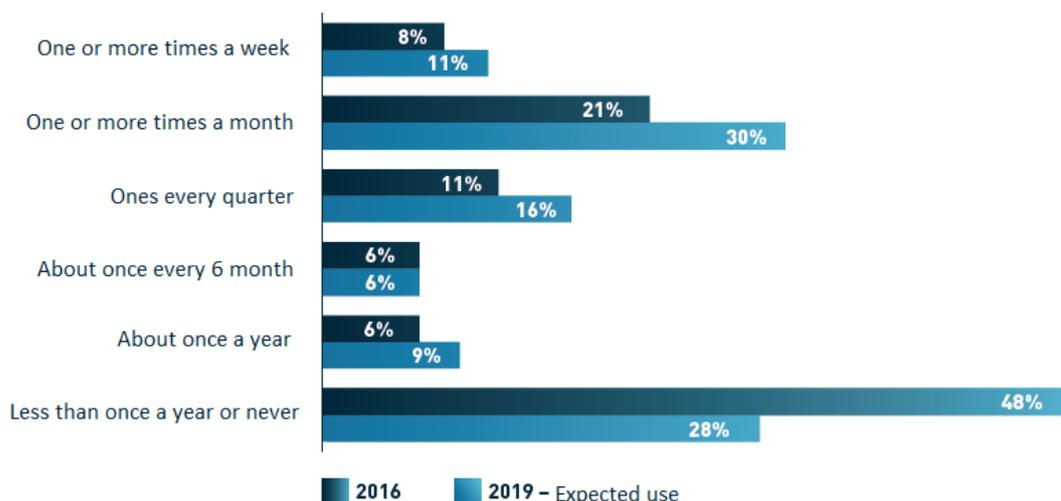
Every fourth person is using the digital library one or more times a month. A considerable proportion of 48% uses the digital library once a year or less often. The total user share is 46%. These are the ones who use it more often than once per year. The non-user share is thus at 54%. The user share is the proportion that uses the library more than once a year.

One can discuss the assumption that a person who uses the library half-yearly can be termed a user. Here, however, it is considered that half-yearly use provides a basis for a regularity that allows the person to build up a knowledge of the library and thus can be termed as a user. This definition is in line with the usage concept that is often used in similar studies: whether the library has been used one or more times in the past year. The definition thus follows from that used in, for example, the definition of active patrons in the library statistics. Looking at future use, there has been a clear shift towards more users and fewer non-users in the future. Citizens' own expectations for use are of course subject to great uncertainty, but nevertheless, on the basis of this, there is some evidence to expect an increase in the use of digital services in the future, and at least it expresses a fundamental basis for demand for digital library offers.

3.2. THESE PUBLIC LIBRARY OFFERS INTERESTS PEOPLE MOST

When you ask people for their interest in various offers from the public libraries, there is still a clear tendency towards preferences for the physical library. Most people thus continue to associate and demand the physical part of the public libraries: the physical book lending, events, and the lending of CDs and DVDs.

FIGURE 4: Which of the following library offers are you most interested in? It was possible to choose up to 3 offers. The percentages therefore do not reach 100%.
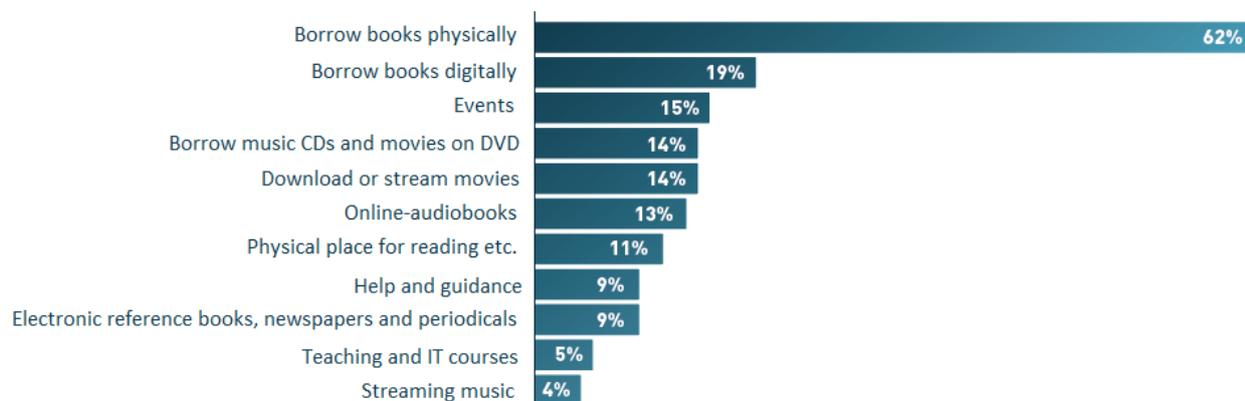
Figure 4 shows what library offers the citizens indicated to be interested in if they can choose up to 3 offers from a selected list. The distribution also gives a hint about the importance of the digital library offers in relation to the more physical library offers. 62% of the citizens are interested in physical book lending. At the same time, many are also interested in the digital library offers: 19% are interested in borrowing books digitally, 14% are interested in streaming movies, 13% for online-audiobooks, 9% are interested in electronic reference works and 4% streaming music. The latter, streaming music, is not currently a part of the digital public libraries offer. Overall, this indicates a significant interest in the digital library. Even though there is a significant overweight towards the physical, there is also a basis for further developing the digital offers of the libraries and communicating the existing digital offers. It can be supported by forward-looking strategies for offer development and targeted dissemination.

3.3. CITIZENS WISH FOR DIGITAL CULTURAL SERVICES IS USER-FRIENDLINESS, OVERVIEW AND BROAD OFFERS

Citizens' preferences for a good culture service are very much about user-friendliness and clarity. It is worth noting that these aspects of the offers go ahead of their content, and that digital library development must, of course, be more legitimate. Figure 5 shows the distribution of users. User-friendly service is the quality that most citizens find important in a digital culture service. Next comes a good overview of content.

It appears that preference for deep selection of niche content is the least popular preference. Furthermore, it appears that there is significantly greater demand for broad services with a broad content than services with a narrow and deeper content.

FIGURE 5: What do you think is most important in the context of a good digital cultural service, whether it be film, music or literature? It was possible to set up to 3 crosses. The percentages therefore do not add to 100%.
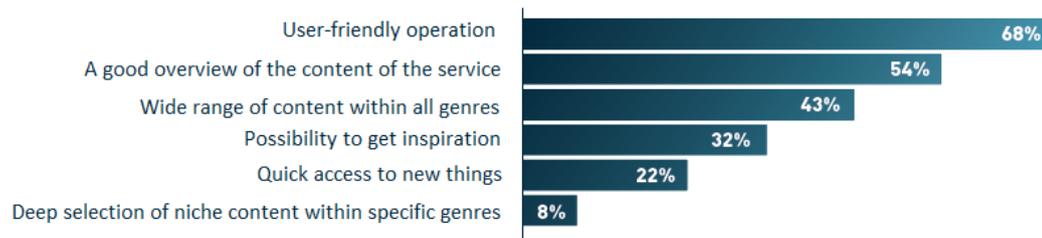
SEBASTIAN BORUM OLSEN BEHAVIOR DESIGNER AT KL.7

What is the use of culture today?

It is a cultural consumption that has been on it is way for some time. Piracy, with Napster as a front figure, created for example a whole new understanding of access to music. And even though record companies tried to criminalize this behavior, that was not what it was about. People did not download music because they wanted to be criminals. It was not a middle finger to the system and the lucrative record industry. It was about being easy. And it is just like the headline for cultural consumption and digitization. This makes it extremely easy. It is the movement we see today. I can hear what I want – I can read what I want – whenever I want. Behaviorally, there is a good explanation for it. That is because we are energy-optimizing. We would like to spend as little energy as possible. Both physically, but also mentally. That's something we almost got hardwired. So, if I can stream a CD or a book instead of going down to buy it, then it trumps that it is easy for me – it is energy-saving for me.

Does it change the way we meet the culture?

You can discuss that. You may be pleased with something that may not be so good, but you can get it here and now. There are few people who scroll through Netflix and think, now there was nothing for me – I jump right into Blockbuster. So, you may choose to watch some secondary movie more often, which may not be the one you wanted. But, conversely, you might also think that if you borrow a book physically, there may be a greater chance that you will read it to the end, even though it may not be your favorite book, but now you have borrowed it, and you first have to go to the library in two weeks. Conversely, in the digital library you can quickly switch to another book if it did not match your preferences. And that's a huge strength and weakness. It gives access to everywhere offers, but it is not self-written that users therefore reach the relevant offers. And the libraries must be aware of the help of the users, so it will not only be an infinite replacement of unfinished e-books – or a first and best mentality in the digital.

What should libraries keep in mind when it comes to digital habits?

There are several things that could be relevant considerations. Many services for example offers the first month membership for free to lower the entry barrier. And that is the first challenge. One must make it extremely straightforward to allow users to try a digital service. And the libraries must think about how they invite different kind of users. eReolen must, for example, not only be relevant to those who read four books a month. It should feel relevant and straightforward to all. Both those who want to look into something "low culture", but also those who want to read Heidegger. And we can also think of those people who experience a large barrier to getting to the physical library. There must be some possibilities in making the barrier minimal in the digital because it is potentially so easy. Obviously, users must be

encouraged to use the libraries' services through content, but the entry barrier is further interesting, because if you have done it straightforward to try a service, one can fast and easily establish a habit; an action so routinely that it happens automatically. For example, if a user wants to watch a movie and previously used Filmstriben. Then there is a good chance that you will not just choose a "secondary" movie on Netflix, but also check what could be interesting Filmstriben. But it depends on the fact that it feels like a straightforward possibility.

Is it possible, that the digital library offers with their many separate platforms and logins, is lacking a form of scandalized user-friendliness, to give the feeling that "it is straightforward"?

Yes, you can say that since everything that is not standardized, it is a clog. Again, if you take it in relation to human cognition, and this is energy saving, we tend to recycle fixed methods that feel recognizable. It is like, if the numbers have been reversed in an ATM, you suddenly cannot remember your code. We always make small mnemonics. And if you constantly must relate to a new library system, a new platform or different municipal licenses, then you tend to drop it. It no longer feels straightforward. And of course, there are all sorts of reasons why there are different platforms and licensing rules, but the more standard and recognizable one can integrate, the less mental energy is required by the user in terms of making use of the digital offers.

In this way, it must never be the responsibility of the user to navigate in the digital. Again, there are good reasons why municipalities buy different licenses, but ultimately it should not be a burden to the user's experiences. It must not become a barrier to their access. It is the task of the intermediaries to make it understandable and easy in the digital. One should not assume that users learn to navigate between x number of platforms and at the same time understand why citizens in one municipality can borrow everything they want digitally, while others cannot. It does not seem logical to them when it comes to the digital. And more importantly, it does not give them the feeling of something that is straightforward – simply understandable – and easy.

3.4 THE CITIZENS KNOWS THESE SERVICES

To get an overall picture of citizens' digital use, it is crucial to know exactly which digital library offers citizens know. Figure 6 shows what services the users of the digital library know. The services known to most users are bibliotek.dk, eReolen and Filmstriben. Far fewer know Litteratursiden.dk and the Biblioteksvagten. Less than 10% of the users know Biblio.dk and Bogbidder. 8% of the users know the digital music service bibzoom, but this is not included in the figure as it has changed form and content this year. It is crucial to remember that these shares are out of the users, and not all citizens. That so relatively few users know the library services, shows a lot of potential. The vast majority of citizens also indicate the lack of knowledge of the offer as the main obstacle to use. Therefore, there is a solid foundation for continuing work on spreading knowledge about the digital library services.

FIGURE 6: Which of the following digital library offers do you know? The question is only asked for the users. The percentages show the proportion of users who know the offer.
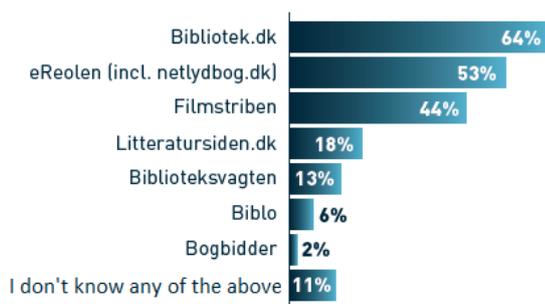
Knowledge of the digital services also gives a good sense of how many people use the digital services. Earlier studies demonstrate that use and knowledge of digital services are closely linked and correlate strongly with each other (for most services, the correlation is about 0.7). Therefore, it makes sense to use the knowledge of digital services as a kind of indicator of the use of digital services. The advantage of asking about knowledge and use this as an indicator of use is that there are reasons to believe that this gives a more accurate picture of users' use and knowledge of the digital services.

When asked directly about use, there are many who have doubts about how often they must use the service in order to qualify as "user." More users may fear to be asked specific "control questions" about the service if they indicate being users of a service. If people have different approaches to this question, it can provide varying and inconsistent answers, which thus do not give a true picture. Based on this assessment, therefore, instead, knowledge is sought, which most people will feel relatively easy by answering. In addition, the list of services to which you are aware is far from exhaustive. At the same time, there has been the possibility of specifying other services and databases, but frequency and distribution for each of these are so relatively few that they are not included in the inventory.

Qualitative findings: The digital offers are not as much as the physical space part of the participants' awareness when they talk about the library. In this way, they mostly think about the possibility of reserving and re-lending books in the digital.

Food for thought: From 2017, the libraries are licensed to Pressreader and Zinio, providing access to 5,000 newspapers and journals.

3.5 FACEBOOK HAS POTENTIAL AS AN INSPIRATION SOURCE

If you look at where the users of the services indicate that they have been inspired, it is especially the library's website. Next, friends, acquaintances and family, as well as the library's staff, are frequent sources of inspiration. However, this distribution is far from being seen as an unchangeable size. As we saw above, the knowledge of library services is relatively limited especially with regard to some services. In addition, social media must also be taken into account. Only 6% of users have been inspired via Facebook, while 80% of users and 75% of all citizens in the survey use this social media. Thus, it is absolutely thinkable that there is a change in the way you are inspired to use the library so that this figure in a few years is much higher.

As can be seen, relatively few users have been inspired via newsletters, but as shown later in this section, the effect of these is relatively high in terms of increasing usage frequency. Thus, there is good reason to consider a focus on this service. As shown in section 6.3, the vast majority say that the biggest limitation for using the library's digital services is lack of knowledge of services. There is therefore good reason for the libraries to focus on disseminating information based on knowledge of where users have been inspired.

FIGURE 7: Where have you been inspired to use the library's digital services? The question is only asked for respondents who have answered that they are using the digital library once a year or more often.
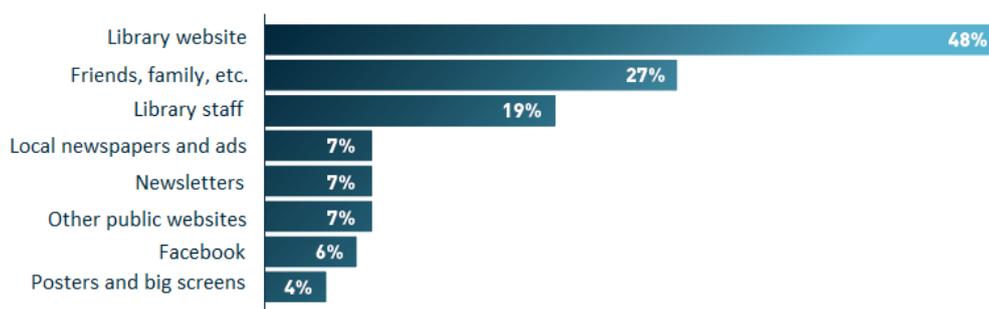
Qualitative findings: Only one of the participants in the qualitative survey followed their local library on Facebook, but several of the participants were positive towards the opportunity. Participants see it as an obvious opportunity to keep up with upcoming events and offers presented by the local library.

3.6. THE LIBRARY STAFF IS ALSO OF SIGNIFICANCE

This section investigates what influence library employees have on the use of the digital library. The overall impression is that library staff have an impact on the digital offers. This can be based on 79% and 83% of the users who respectively have answered that they find that they can get personal and competent guidance in using the digital offers. 83% of the users experience that library staff are good at communicating the digital offers. In addition, there are also an interest in the library services that involve the library staff. These could be library offers about a digital librarian, a 24/7 online service that can help and guide. This offer has 10% of all citizens crossed as an offer they could wish for. All things considered, this points to the fact that library staff play a role in the digital library.

FIGURE 8: **User evaluation of library staff in two dimensions.** Percentage who has answered "To a large degree" or "To some degree" to the questions. The question is only asked for respondents who have answered that they are using the digital library once a year or more, or respondents who have answered that they are using the physical library once a year or more.

It is easy to get personal and competent guidance regarding concrete handling of the library's digital offerings — 83%

The library staff are good at communicating the library's digital offers — 79%
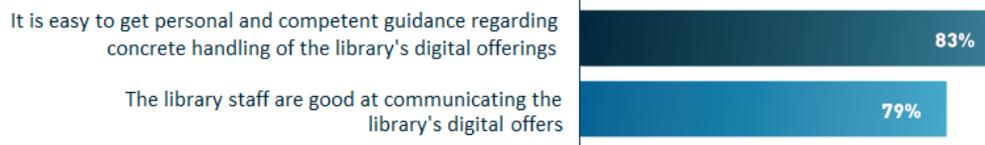
TINE JØRGENSEN CHAIR OF THE DANISH UNION OF LIBRARIANS

What are the digital challenges of the librarians?

The issue largely depends on how librarians can put themselves in play in relation to the digital. Both by communicating knowledge about the digital offers, and by integrating their skills into the digital. Of course, it is regrettable that your survey shows that many citizens do not know the digital resources. But you can also turn it around and say good, here we actually have something we can work with and make more tangible to all – for the benefit of ourselves and the citizens. And here your study shows that librarians are highly qualified to convey relevant knowledge about the digital offers. But we obviously need to think about how librarians should draw attention to digital services and how to use their skills in conjunction with the digital.

Does the digital offering challenge the role of the librarians?

The digital has a lot of potential, but it cannot stand alone. There is a need for librarians who can show how to use the different services – and create a desire to use the services. And more importantly, librarians are indispensable in helping users when their information needs are more complex and require more than one simple search. Nor should we get lost in the digital possibilities. I am immensely excited about what the digital library can offer, but I'm also really fond of the physical. And sometimes it is made into an either/or situation, where I think it is more about both one and the other. So how the physical and digital can complement each other. It is important that people are not afraid to question the digital, because it is necessary that we reflect on all the possibilities; How would we like to use them; And how we want to shape them.

In relation to reading and learning, we do not yet know the consequences of the digital. Here it is important that librarians are involved in the process of how the digital should be shaped. Citizens are used to meeting the librarians in the physical space, and they must also be able to meet a librarian digitally. For example, would it be natural to be friends with your librarian on Facebook? There are many questions and contexts that we together should figure out how to modify. We should also think about the users in the design of libraries offers. Users are in the need of other forms of knowledge today than before. Now it is not just about finding a book. And the requirements for libraries are probably only bigger as they get used to new tools. And therefore, you should turn it around sometimes and ask what the users are thinking about this? And again, the libraries become relevant because they are in contact with the users both in the digital and in the physical – therefore they must be the ears of the libraries, which can help to gain further knowledge about how the digital offers can be reconsidered.

Should librarians be more active and aware of the social media?

I think it is good to try out all possible media but at the same time it is important to keep in mind that it is about target groups and contexts, and it is therefore difficult to generalize in this area. Facebook may be relevant in many contexts to raise awareness about libraries' offers, but libraries must think about what they communicate and who they aim for in a given situation. Is the aim to communicate to the users or to interact with them? Both parts may be relevant in different situations. And what authority does the library want as the sender? Are the social medias information channels with the libraries as sender or an opportunity to respond to users' wishes? Both, I think. When you enter the social media, it is precisely based on the "social". There is of course always a sender-receiver relationship, but the borders are much more fluid. And therefore, libraries can use social media to give us an understanding of what the users want.

It must be natural for librarians to think about where they meet their users. And that applies to both the digital and the physical. In which contexts do the librarians meet them? And does it happen on the users' terms, or do the libraries meet them with their own dissemination agenda? If you place it against the physical, the libraries are an institution with four walls where people have often visited with an idea of how to behave in the context that the library has now helped to establish. Therefore, the libraries also have a better idea of how they communicate with the visitors here. But when we for example talk about Facebook, there are some other requirements that applies.

I miss a direction where it is not just the digital development that defines the sense of direction, but also the users, libraries and librarians. Librarians will probably have to handle several communication tasks in the future, for example on social media, but I think it is a crucial point that basically you have a well-made product with the library, so if communicational tasks are taking up all the time rather than proficient and qualified dissemination and curative work, it is a loss for the citizens and libraries.

3.7. THE USE OF THE DIGITAL LIBRARY ACROSS A LIST OF BACKGROUND FACTORS

How much you use the digital library, like many other library conditions, depends to a considerable extent on a number of background factors. When you dive into the analysis, you find that there are some interesting differences across relationships such as gender, age, if you have children under 15, and education. These differences are the expression of some natural "groups" in society, and the differences in these groups are so basic that they can be tracked in one's use of the digital library offers. Libraries can use this knowledge to target their offers to these groups. Significant differences are being highlighted below, followed by two pages that focus specifically on the young people's use of the digital library.

Education has an impact but less than physical library offers

When looking at the importance of the education level for the use of digital library services, a pattern is found that also applies to the use of physical library offers. Thus, the proportion of frequent digital users is growing with an increasing education length. However, it is interesting that user share and frequency of use do not rise linearly as with the use of physical library offers. It can be seen from the figure below that the biggest effect of education is through the use of digital library facilities already after a student degree. Thus, the proportion of frequent digital users is "only" rising from 24% and 23% of people with primary or tertiary education completed as highest level of education, to 38% for people with medium-cycle and long-cycle higher education. For the physical library, the percentage gradually increases from 30% up to 50%.

FIGURE 9: Proportion of frequent physical and digital users by education level. Percentage that has responded "One or more times a week" or "One or more times a month" to the questions.
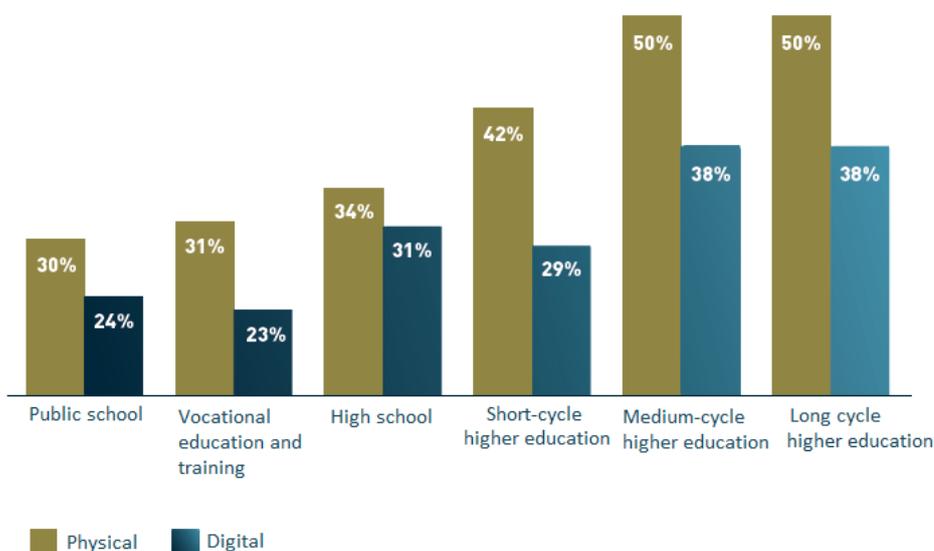
Women take their library usage into the digital

Gender differences follow the same pattern as the use of the physical library: Women generally use the library, including the digital library, more than men. The user share for the digital library is 53% for women, while it is 37% for men. On average, female users know 2.3 of the library's digital services, while the average of the men is 2.1. The women, more than men, know services like bibliotek.dk, Litteratursiden.dk and eReolen, while men know more than women about digital music offers and factual reference books. Thus, there are signs that women are more familiar with the "book-related" services, and it is possible that women use their physical library usage in their digital use, for example by knowing and using bibliotek.dk, which is largely about physical books. However, in relation to evaluating the library's dissemination of digital offers, there is no significant difference between men and women, except for the question of whether the library staff are good at communicating digital offers. Here the men are a bit more satisfied than the women. Men perceive more than women that content and topics are not interesting enough. Women experience more than men that lack of overview and difficult navigation limit their use. Men prefer digital music services and online games, as well as factual encyclopedias, while women may wish for more e-books, audio books, and a personal library profile.

Families with young children are restricted by access

Families with children under the age of 15 use the digital library services more than people without young children. This connection is the same as for the physical library. For families with children, the user share is 67%, while for people without children it is 52%. Parents indicate, to a greater degree than the rest of the users, that occasional access and log-in as well as inadequate and difficult navigation are limiting for their use.

Digital library services are mostly used in municipal types with large provincial cities

The overall picture is that there are no big differences regarding the use of the digital library, but there are significantly larger differences between population groups. Nevertheless, there is less tendencies in the direction that some municipalities generally have higher usage rates than others. Citizens in the major provinces (municipality type C) have the highest user share. It is therefore in this municipality type that the digital library is most commonly used. This difference is probably due mainly to differences in segment composition in this municipality type. The other municipalities differ do not differ significantly from each other on the question of frequency of use. Users in the largest cities (municipality type E) know more of the digital library services than users in municipality type A, which are mostly the smaller municipalities. Users in the largest cities (municipality type E) seem that the content and topics are not interesting enough, in a larger extend than the other users.

You can read more about the municipalities in section 9.

3.8. A FULL EXPLANATION MODEL FOR USING THE DIGITAL LIBRARY

The conditions highlighted in the previous section do not provide an overall picture of what matters most. To get an overview of the conditions that imply the usage frequency of the digital library offer, an overall model has been made. This model makes it possible to compare the different conditions and to get an overview of what matters in particular to digital library use.

All in all, there are many facts that have an impact on the use of the digital library. This model thus represents a selection of factors that matter most. An attempt to establish a solid and meaningful model.

Analysis of all citizens in the survey shows that what is most directly relevant to the citizens' use of the digital library is:

- How often the citizen uses the physical library (0.6)
- Experience in navigating on the internet (0.05)
- Citizen's highest education (0.03)
- Gender (0.03 for women)
- If you have children under 15 years of age (0.02)

At the same time, there are also three factors that negatively affect the use of the digital library:

- Age (-0.06)
- Lack of knowledge of the offers (-0.09)
- Concrete bad experience with using the services (-0.02)

This is to say that citizens characterized by these points have lower usage rates than the others. The factors that affect the use of the digital library are shown in the figure on the next page. The model should be understood as having two analytical layers. The dark blue bubbles and dark blue arrows indicate what directly influences the citizens' use of the digital library. The light bubbles and the light blue arrows indicate what has an indirect influence. It is therefore intended for the more "nerdy" readers who want a more nuanced overview of the complexity of using the digital services.

Thus, the frequency of use of the physical library has a strong direct effect on the use of the digital library, whereas how often you used the physical library as a child, affects this. The model should not be understood as a complete overview of everything that affects library usage, but as a selected summary of the most important factors of those that have the greatest impact.

FIGURE 10: **Explanation model for using the digital library.**
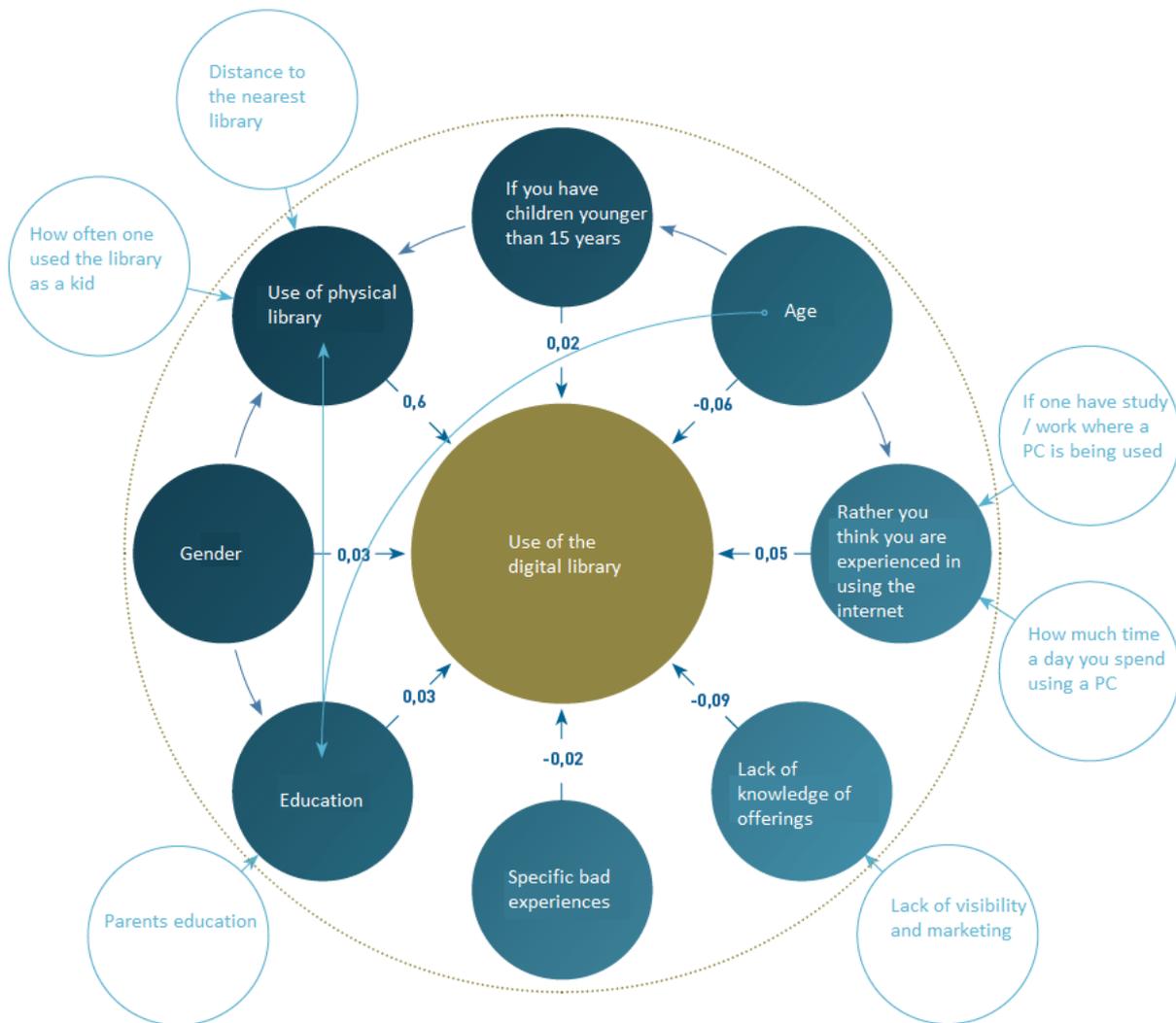
Tips for reading the model: The dark blue bubbles are the primary model, while the light blue bubbles are for the more "nerdy" readers. The numbers next to the arrows indicate the relative strength of the factor, i.e. how much a factor means compared to the other factors. Here you should not look at the sign but on the size of the number to see how much it means and on the sign to see if it has negative or positive significance for the use of the library.

The lack of knowledge of offers has a coefficient of -0.09 and thus has a greater importance in the model than if you experience yourself as experienced in using the internet, which has a coefficient of 0.05. At the same time, lack of awareness of offers has a negative coefficient, which means that it has a negative impact on the use of the digital library, while experience in using the internet has a positive influence on the use of the digital library.

The most important factor for using the digital library is the use of the physical library. This factor has a larger impact than the others. In principle, one can say that there may be a "the chicken or the egg" situation: if the frequent physical users get used to the digital offers and thus become frequent digital library users, or if the frequent digital library users also become used to the physical library and thus become frequent physical library users. It can be a bit difficult to say what direction influence is going on, but in any case, there is a connection. It may also be that both directions of influence are true to different users, or that the two factors reinforce each other. Since the physical library has existed longest, it is most likely for most people, however, that physical library usage addresses digital library usage. The factors that particularly have an impact on the use of the physical library are thus the distance to the physical library, how often you have used the library as a child, as well as gender, age and if you have children (under 15 years).

There is also a tendency towards the picture that background factors influence the use of the digital library: Gender has a bearing on the fact that women use the digital library more than men. Education has the effect that the more years of education, the greater the probability of using the digital library. Likewise, people with young children use the library more than people without young children. Finally, we see a strong tendency for young people to use the digital library significantly more than the elderly.

IT experience is also an important factor in explaining the use of the digital library. People who feel safe and are experienced in the use of the digital in general tend to use the digital library service more. The conditions that really matter is if you consider yourself an experienced IT user, whether you have a job or study, where you use a computer or the like, and how many hours you use on computer, smartphone, tablet etc. a day. Age also has a strong impact on the likelihood that you will experience yourself as an experienced user of the digital.

The two factors that have a strong explanation for using the digital library offer in a negative direction are concrete bad experiences and lack of knowledge about the library's digital offers. Consequently, bad experience may cause people not to use the digital library, and it is therefore crucial for the library to prevent such, although there may be many different things that can lead to bad experiences with the citizens. As shown on page 75, there are relatively few citizens who indicate concrete bad experiences as a reason for not using the digital library more. Those who in turn do, however, have a significantly lower frequency of use than others.

Likewise, there is a significant connection between whether you do not know anything about the digital library offers and if you do not use the digital library. This factor is strongly linked to whether there is a lack of visibility and marketing about the digital library offers. As with physical library usage, it can be difficult to determine if the effect goes the other way, so that the rare users also have less knowledge of the offers. However, increasing the knowledge of offers is an obvious effort to get more users.

In continuation of this analysis, there are three obvious focus points for libraries in the effort to increase the digital library use:

1. Support the use of digital services among groups with low IT experience
2. Prevent bad user experience among new users
3. Make an effort to spread the knowledge about the digital library offers

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Qualitative findings: Problems with creating new user profiles and logins resume as a barrier for participants in the use of digital services. It may be difficult to see what lies behind the organization of the various institutions, services and the corresponding user profiles.

3.9. A TOTAL EXPLANATION MODEL FOR USERS FREQUENCY OF USE

Another cross-section, as it may be relevant to look at in the light of the above, is what determines how often existing users use the digital library. Frequent use is of course important for users' benefit from and loyalty to the digital library services. The users are defined as citizens who have indicated that they use the library's digital offers more than once a year. These people already have an experience with the digital library and an opinion on the quality and dissemination of the offers.

In short, this model looks at what determines whether you use the digital library once every six months, several times a month or even every week. This explanation model focuses on the library's and users' concrete experiences with the offers, making it action-oriented for the libraries. Thus, it ignores background variables such as gender and age, which certainly also means something for this connection.

The analysis shows that the library conditions that are of greatest importance to users' use rates are:

- Use of the physical library (0.43)
- Interest in borrowing digital books (0.07)
- Knowledge of eReolen and the services Litteratursiden.dk (0,07 and 0,04)
- Experience that you find what you are looking for (0.06)
- That one has been inspired via newsletters (0.05)

The conditions that have a negative impact on users' use are:

- Lack of knowledge of offers (-0.08)
- Concrete bad experiences (-0.05)

These factors are shown in Figure 11.

FIGURE 11: Explanation model for users' use of digital library offers.
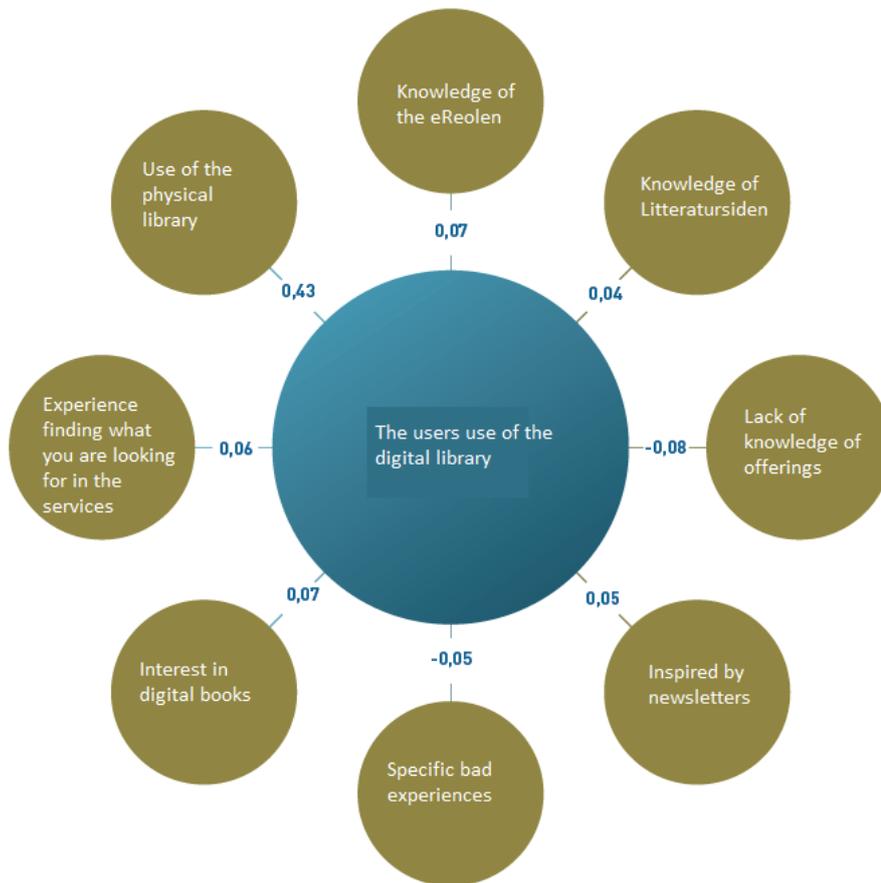
Model Description: Multiple linear regression analysis has been performed with users' use frequency as dependent variable. The numbers next to the arrows are standardized beta coefficients. Overall, the model explains about 23% of the variation in the dependent variable.

Again, in this model, physical library usage is by far the most important explanation factor for explaining the use of the digital library: users who use the physical library frequently also use the digital library frequently. Like all citizens, it can be difficult to say which way the effect is: if you become a frequent digital user be being a frequent physical user, or if you become a frequent physical user by being a frequent digital user. One could imagine that there is some kind of mutual effect, where frequent physical library use and frequent digital library use mutually reinforce each other.

Similarly, an interest in lending digital books, e-books, also means much to enhance digital library usage. This can support libraries by giving users good experiences with e-books or drawing attention to the possibility of renting e-books from home.

This is very much in continuation of the factors familiar with eReolen and Litteratursiden.dk. These services especially have a strong effect on the use of digital library so that users who know them more often use the digital library than users who do not know them. Here again we have a "chicken or egg" situation where it can be difficult to say whether those who know eReolen and Litteratursiden.dk thereby use the digital library often or those who use the digital library often thereby know eReolen and Litteratursiden.dk. No matter what, there is a strong connection between these services and the frequency of use, and it is therefore worth paying attention to.

Another factor that means a lot for users' usage is if you find what you're looking for in the services, when you're looking for something specific. An easy entry is important for this relationship, but also feeling secure about having an overview of which offers the service contains and which it does not contain. This relationship is aimed at an area where libraries are under heavy pressure from commercial services.

One last factor that matters to users' use of the digital library is whether they have been inspired by newsletters. Relatively few users indicate that they have, only about 7%. However, when this factor is decisive, this indicates that the effect of these 7% is relatively high. Thus, there is a clear potential for this source of inspiration.

Like all the citizens, the conditions that can make users become rare users of digital offers are concrete bad experiences and lack of knowledge about offers.

For several of the factors, it is relatively safe to say that these lead to higher library usage. For others, it is important to note that there is a connection. In other words, there is an uncertainty as to the way in which the impact is going. This does not change the model as such, but one should be careful in interpret it so that, for example, knowledge of Litteratursiden.dk automatically leads to more frequent digital library usage.

FIGURE 12: Relationship between distance to nearest library, and physical and digital usage frequency.
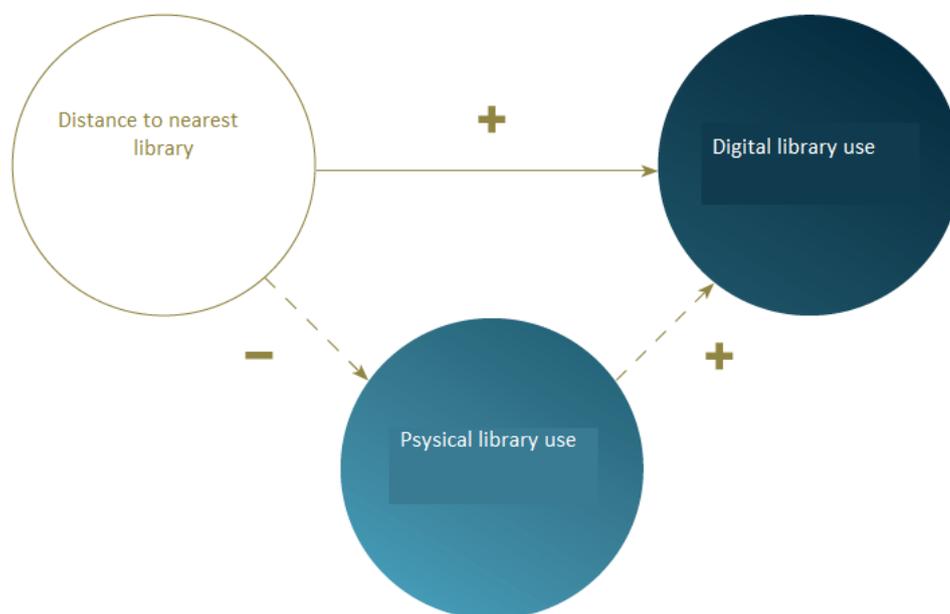
Model description: The relationship is strong and statistically significant and also applies when considering gender, education, age, whether you think you are experienced in navigating on the internet, and if you have young children. Distance to the library is measured in minutes of transportation at intervals of 10 minutes.

3.10. DISTANCES OF THE PHYSICAL LIBRARY INCREASE THE DIGITAL LIBRARY POTENTIAL

The analysis also looks at the role that distance to the nearest physical library plays for the digital library offering. As an analysis theme, it is very interesting. Partly because both in this and previous study it has been shown that increasing distance to the physical library decreases the wanting to use and actual use of the physical library. First, because you can imagine a reverse "substitution potential" for the digital, the longer you have to a physical library, the more you will need a digital library offering. The latter will equally mean that for libraries in sparsely populated areas there can be a great potential in getting people to use the digital library, even when the use of the physical library is limited.

This is a somewhat complicated analysis because the immediate image is the same for the digital usage pattern as for the physical: the more far away you live from a physical library, the less you also use the digital library offer. A closer analysis where we check for both physical library uses and education, etc. allow us to look at the isolated context of all the other relationships. This analysis shows that the expected relationship exists but that it is hidden or suppressed by the strong link between physical library usage and digital library use.

The relationship between the distance to the physical library and the use of the digital library is illustrated in figure 12. Thus, there are two contradictory effects, so that physical library usage as mentioned has a positive effect on digital library usage: the more frequent one uses one, the more frequent you use the other. At the same time, the previously mentioned context also applies that the more far away you live from the physical library, the less often you use the physical library. Conversely, however, the longer you live from the physical library, the more frequent you use the digital library. Thus, one can imagine a kind of substitution effect of the digital library, where those who have poor access to the physical library instead use the digital. Such a contradictory effect can immediately seem difficult to transfer to reality, but one can illustrate the difference that a rare user of the physical library that has a long way to the nearest library will use the digital library more than another rare user of the physical library who live close to the nearest library.

Similarly, a frequent user of the physical library living near the physical library will use the digital library less than another frequent user of the physical library that lives far away from the physical library.

FOKUS: THE YOUNG

From several libraries, there is a desire to focus on young people – the future library users! There are several reasons for this focus: partly because the young people are a difficult audience, which generally has a lower user share of the library than others and lower satisfaction with the library, partly because the young people constitute the future library users. This section therefore focuses especially on the 15-29 year-olds.

THE YOUNGS ARE FREQUENT USERS OF THE DIGITAL

The tendency for young people to use the library less often than older people does not apply when looking at the use of the digital library. For the 15-29 year-olds, the proportion of users is between 62% and 49%, while for the 50-69 year-olds it is between 37% and 40%. This difference may be due to differences in digitization, as young people are also more digital than older people.

FIGURE 13: **How often do you use the Danish public libraries digitally and physically? (15-29 year-olds).**

	THE DIGITAL LIBRARY	THE PHYSICAL LIBRARY
One or more times a week	9%	5%
One or more times a month	19%	26%
Once every 3 months	14%	18%
Once every 6 months	9%	9%
Once a year	10%	12%
Rarely or never	39%	30%
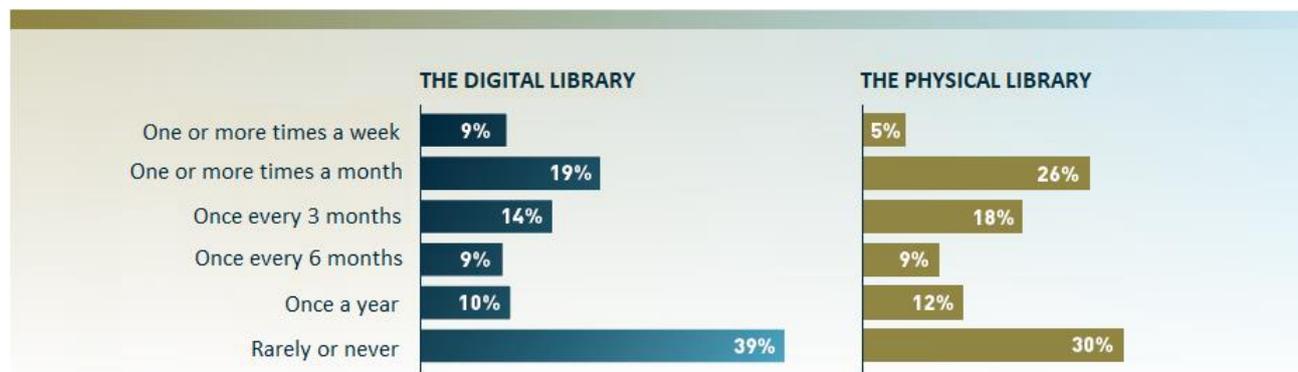
FIGURE 14: Which of the following digital library offers do you know? (Top 3 among 15-29 year-olds).

The question is only asked for the users.
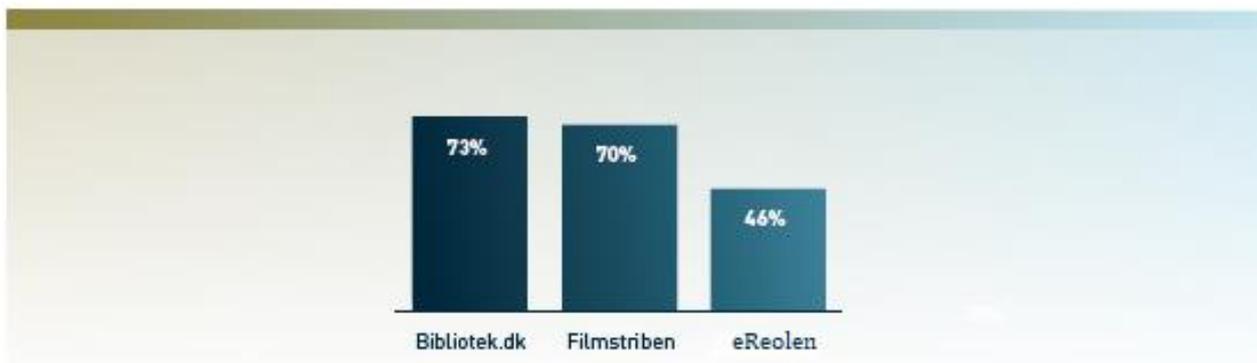
FIGURE 15: Evaluation of the digital library on different dimensions (15-29 year-olds).
Percentage who has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.
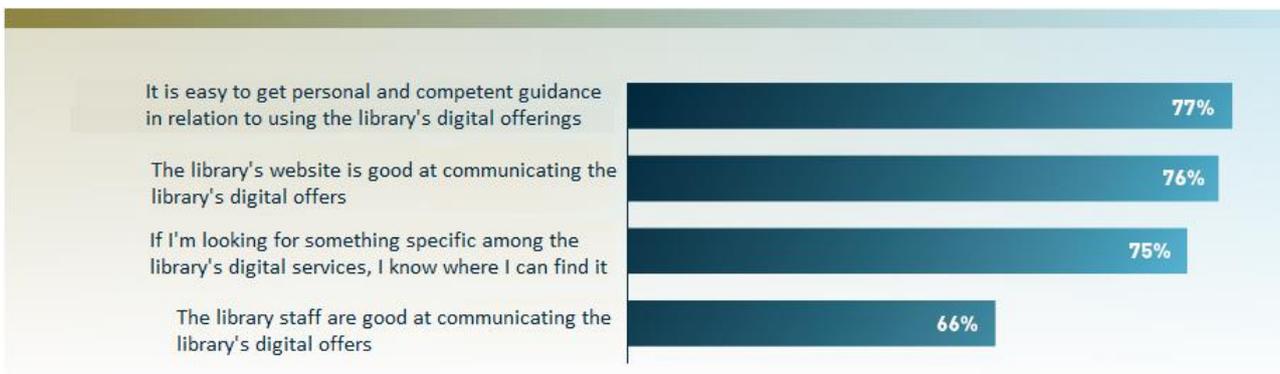
FIGURE 16: Where have you been inspired to use the library's digital services? (Top 3 15-29 year-olds).
The question is only asked for respondents who have answered that they are using the digital library once a year or more often.

The library's website 40%
Friends, acquaintance, family, ect. 35%
The library staff 15%

FIGURE 17: Restrictions for further use of the digital library (Top 3 15-29 year-olds).
The question is only asked for respondents who have answered that they are using the digital library once a year or more often.

Lack of knowledge of offers 48%
Lack of visibility and marketing 30%
Limitation on the loans 26%
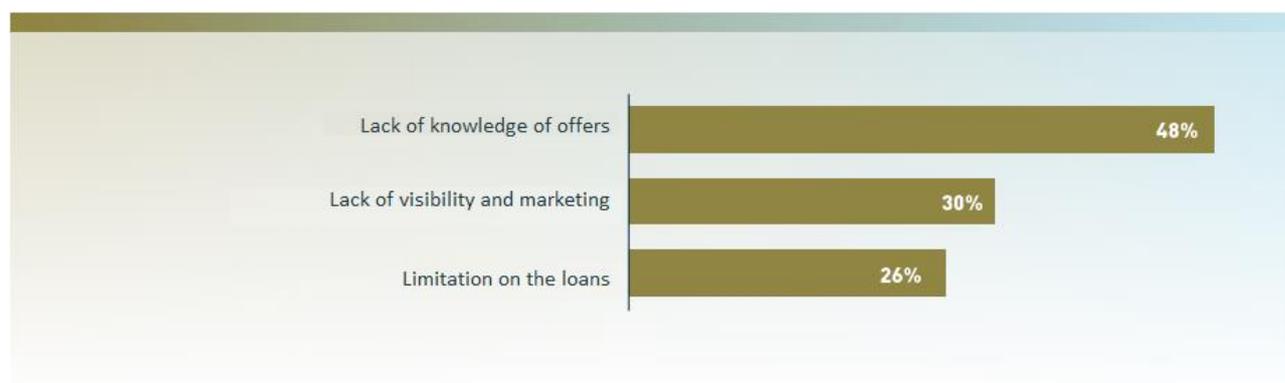
In addition, young people increasingly use digital cultural services – public as well as commercial. Another difference is that the young people more frequently than older people are a part of digital communities. 80% of the 15-29 year-olds answer that they experience contact with other people when communicating over the Internet. For the rest of the population, this share is 57%. In addition, more than twice as many of the young people participates in debates and social groups online than the elder people.

The young users know more library services than the older users. The 15-29 year-olds know on average 2.8 services, while the 60-69 year-olds know 2.2 services. Like the rest of the population, the knowledge among the young users is greatest for bibliotek.dk. However, Filmstriben are more known among the young users than eReolen which are the opposite if you look at the entire population. 70% of young users know

Filmstriben, for all age groups this share is 46%. When you ask the young people about the relationship between the physical and digital library, one finds that:

- 40% believe that good digital offers to some or a considerable extent reduce their need to use the physical library
- 46% believe libraries should focus their efforts on expanding digital library offers over the traditional physical library offering
- 87% believe that physical libraries must pass regardless of how much people switch to digital library usage

... BUT ALSO MORE CRITICAL

Young people are more reserved in their assessment of the library's dissemination of digital services than other age groups. 76% of 15-29 year-olds believe that the library's website is good for communicating digital offers, while for the other age groups this share is 82%. Likewise, 66% of the young people consider that the library's staff are good at communicating digital offers, while for the other age groups 83% is. This difference is extremely significant. Like the other age groups, the young users are inspired especially through the library's website, as well as friends, acquaintances and family. The young users, like the other age groups, feel that lack of knowledge of offers is the biggest limitation. However, 26% of young users find that lending restrictions on e-books are a limitation on further use of digital offers. For the other age groups, this is only 15%. In addition, the young people are significantly more concerned about content and topics are not interesting enough, than the other age groups.

LOUISE SPRINGBORG INTERACTIVE DESIGNS AT THE NATIONAL GALLERY OF DENMARK (called *SMK in Danish)*

What did you do to involve the young people at SMK?

First of all, we have created Unges Laboratorier for Kunst (ULK) (Young people's art laboratories). It is an initiative that started 10 years ago via the Egmont Fund, but has changed form along the way. Today ULK is the social and creative community of SMK with approx. 40 young volunteers between 15-25 years. The ULKs meet every Wednesday afternoon at the SMK, where they discuss art and produce art dissemination. The purpose of ULK is to make SMK and art inclusive and relevant to all.

ULK is a place where young people can cultivate their common interest in art through the development of various projects. ULK is not a talent school or image school for young people who want at the art academy, architectural or design school. ULK is a community where young people establish the framework for meeting with art and art dissemination through collective creative processes. All ULK projects are based on user involvement as a target and resource. ULK is itself user involvement. But ULK also creates user-contributing projects that target other target groups. Originally, ULK was intended as a targeted young-to-young dissemination and communication. Today, we do not think of target groups as defined age segments. Depending on the content of the project, the ULKs today decide who they want to cooperate with.

Can you say that these projects have a local cohesion in the wake of the user involvement of young people who, in the next stage, employ other groups in society?

Yes, and that's what we want with ULK: To make art relevant to everyone. An example could be the project "Point and Shoot". The project is, in short, a collaboration between ULKs and marginalized young people in socially disadvantaged residential areas in Nørrebro, Copenhagen. The mission was to use photography as a means of expression and give the word to the young people and make conversations about what art can and how it can relate to the young people's everyday life. Another example could be ULK's decoration of the drug consumption room Skyen in Istedgade, Copenhagen, in close cooperation with its users. The starting point has been artworks from the SMK, mixed digitally with the users' thoughts about favorite places and childhood memories. The result was wall-to-wall photocopies with stories about, among other things, Christiania, Morocco and the Men's Home mix with works by, among others, Christen Købke's Sortedamssøen towards Nørrebro and Johan Thomas Lundbye's Zealand landscape.

We often find that the ULCs have a great interest in projects that have a social dimension in themselves and are inclusive. It creates engagement and motivation for the young people when they find that their projects give something to others and are relevant to our society. Many ULKs come from resource-intensive families, and they want to use their strength and resources to open the museum's doors to an audience

who was not used to coming to the SMK. In this way, the ULKs become an entrance to audiences that are not used to the museums, but who also largely relate to art.

Can you communicate to new audiences when you integrate the young people into projects?

Certainly. The ULKs have powerful tools in terms of digital communication, which can also be of importance both locally and to new target groups. Especially in the form of communication and distribution of projects. The ULKs developed and settled one of SMK Fridays events, where the young people's promotion and sharing of the event meant that SMK never had such a strong connection to a SMK Fridays. Neither digital nor physical. In that sense, it was interesting to see how one of SMK's already established events reached a whole new audience because the young people communicated to the outside world through their own channels.

Does SMK give its authority to the projects and leave it entirely to the young, or is there some form of synergy between you as facilitators and the young?

Co-operation and volunteering is an incredibly exciting field to work in. How do you facilitate the young people through creative collective processes? And how do you maintain your motivation and create a sense of ownership? Synergy between SMK and ULK is that SMK helps to identify the areas to be reunited. Our experience shows that the creative and co-operating space thrives best when the framework is set in advance. Then it is the young people who control the process and develop the projects.

In the developing phase, the SMK's voice does not weight heavier than the votes of the ULK. But SMK must challenge ULK creatively. As facilitators, we must ask for their choice and provide room for both negotiation and argumentation. Here it is important that SMK is not a governing authority, and we must maintain that it is the ULKs who own the projects. So, it is a necessary part of the dynamics that we set some frameworks, but it is even more important that we do not go in and make decisions and that we are being controlling. As soon as we do that, they do not care anymore. It is important to keep in mind that they are the owners of the projects. Thus, to let the project out of SMK's control while believing that it reaches a place where it gets both reverberation and relevance through the young people's commitment.

4. SEGMENTATION OF CITIZENS

4.1 ABOUT THE SEGMENTAL ANALYSIS

Based on data collection, citizens and users of the Danish libraries can be divided into a number of segments. Segmentation is done using the statistical tool "cluster analysis". The method identifies segments as groups of people that look similar and at the same time are significantly different from people in other groups.

In this analysis, eight segments have been identified. Within each segment, there are variations in the characteristics of the persons and within the same segment, there may be people who differ from each other on some points, but the people will have more in common with the center in this cluster than with the center in the other clusters. Segmentation is made based on the following variables:

- Gender
- Age
- If you have children under 15 years of age
- Education
- Use of the physical library
- Use of the digital library
- Three factors that collected summarize respondents' digitization rate:
  - Digital behavior in everyday life
  - Internet access
  - Security in use of the digital

In the method annex at the end of this report, the method of segmentation and the variables used will be further elaborated.

4.2 THE EIGHT SEGMENTS

The analysis has shown that there are eight prominent segments when focusing on digital conditions, relation to library offers, as well as other background characteristics of the citizens. In summary, the segments can be distinguished separately based on gender, age, education, use of the digital library, digitization, use of the physical library, their expectations for and demand for the digital library, their sources of inspiration, with which purpose they use the offers, what digital services they know when they use the bids and much more, which will be elaborated on the following pages. Based on the segments' primary characteristics, it is chosen to name the eight segments as follows:

- The male parent
- The female parent
- The analog man
- The analog woman
- The culture-consuming man
- The culture-consuming woman
- The super digital man
- The super digital woman

The segments are thus defined based on different circumstances. For some segments, it is their life situation, which is most crucial because it is this which means something for their usage pattern in relation to the digital library. For others, it is to a greater extent their digitization or patterns in their cultural consumption. Gender is a continuous factor that separates the segments.

THE MALE PARENT

Is moderately frequent user of the digital library. He is very digital and frequently uses other digital cultural services. He emphasizes broad content among the offers' selection and is particularly limited of lack of knowledge of the libraries' services.

- Have children under 15 years of age
- Is primarily between 30 and 49 years
- 44% work as a functionary employed
- 46% believe that good digital library offers reduce your need for the physical library
- 51% believe libraries should focus on expanding digital services rather than physical ones

Digitalization profile: Is particularly high on the technology dimension, which indicates high internet access both at home and at work as well as from several units. Also, high score compared to e-readiness and digital behavior in everyday life.

Usage pattern in relation to library offers: Is a relatively frequent user of digital library offers, however scores below average for general use of the physical library.

Education level and employment: The segment vary in education. Many are employed as a functionary or skilled person.

Where is the segment especially inspired: The library's website, friends and acquaintances as well library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes broad content. Could wish for more offers regarding e-books and audiobooks.

Recommendations:

- An effort focusing on the dissemination of available services
- In particular, dissemination of services with wide content in entertainment and experiences
- Providing "quick" offers there e.g. can be used during transport and from a smartphone
- Focus on services with child-related content

THE FEMALE PARENT

Uses the digital library frequently and for various purposes. Including entertainment and experiences as well as child-related offers. She emphasizes broad content in the service, but is limited by difficult navigation.

- Have children under 15 years of age
- Is primarily between 30 and 49 years
- Is a frequent library user both physically and digitally
- 18% primarily use child-related offers among the library's digital offers
- 45% have completed a higher education

Digitalization profile: Is particularly high on the technology dimension, which indicates high internet access both at home and at work as well as from several units. However, she scores relatively low on e-readiness, which indicates she is less confident in using the digital.

Usage pattern in relation to library offers: Relatively high both in relation to the physical library and to the digital library.

Education level and employment: Especially citizens with medium term education and vocational education. Many are employed as a functionary or skilled person.

Where is the segment especially inspired for use: The library's website, friends and acquaintances, and the library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes broad content. Could wish for more offers and a personal library profile as well as e-books.

Recommendations:

- Efforts to disseminate knowledge of the services
- Offers must be easy to navigate and log in to, etc.
- Focus on child-related offers
- Focus on services with broad content of audio books and e-books
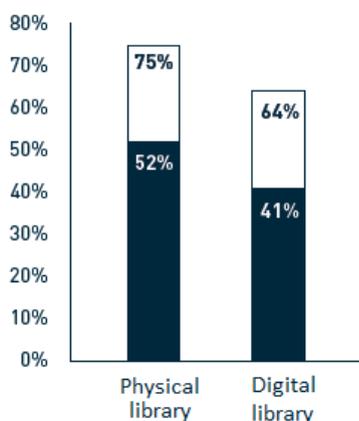
THE ANALOG MAN

Is the segment that rarely uses the digital library. He does not use the physical or digital library particularly frequently, and he is very little digital in his everyday life. There are many older people in this segment. The analog man differs in a wide range of areas significantly from the other segments. This is true of his low level of knowledge in relation to the digital offers of the libraries, where he hears of the offers, where he uses the digital offers and what he could wish more of.

- Is 50 years or more
- Is very little digital
- 79% use the library digitally less often than once a year
- 40% of the users do not know any digital library services
- 90% believe that library staff are good at communicating the library's digital offers

Digitization profile: Low on all three digitization parameters. Especially on the dimension of digital behavior in everyday life.

Usage pattern in relation to library offers: Low both in terms of the use of the physical library and the digital.

Education level and employment: To a substantial extent pensioners, but also some in employment and with very different educational backgrounds.

Where is the segment especially inspired for use: Via the library's website and through local newspapers and ads.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes broad content. Could wish for more help with Borger.dk, e-Boks and Digital Post.

Recommendations:

- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and in starting using them
- Focus on offers that contain knowledge and learning
- Inspiration through local newspapers and ads 60%

THE ANALOG WOMAN

Is rare user of the digital library. She uses the physical library a bit more frequently than her male variant. She is characterized by being very little digital in her everyday life, which affects her use of the digital library offering. Among those who use the services, they primarily visit the physical library.

- Is primarily 50 years or more
- Is very little digital
- Has a low user share of especially digital library offers
- 76% is a pensioner or on early retirement
- 22% use the library's digital offers when the visit the physical library

Digitization profile: Below the average of the three digitization parameters. Especially on the issues of digital behavior in everyday life and technology.

Usage pattern in relation to library offers: Located close to the average in both conditions.

Education level and employment: To a substantial extent pensioners with primary or vocational education as the highest education level.

Where is the segment especially inspired for use: Library website, staff, friends and acquaintances.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes the opportunity to get inspiration for new things. Want more help with Borger.dk and a personal library profile.

Recommendations:

- Focus on offers that are easy to navigate
- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and do not necessarily have the desire to start using them
- Inspiration through contact with library staff
- Offers that inspire the use of material you would not have found
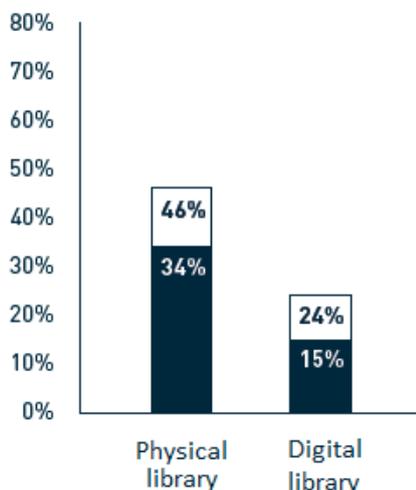
THE CULTURE-CONSUMING MAN

Is the segment that has the largest share of frequent users of the digital library. He is moderately digital in his everyday life and in general, but in turn, super digital when it comes to his library use. He has a broad knowledge of the library's digital services.

- Is 50 years or more
- Is a frequent library user physically and digitally
- 56% use digital library services for entertainment and experiences
- 52% is a pensioner or on early retirement
- 66% expect to use the digital library once a month or more often in 3 years

Digitalization profile: A bit above the average in terms of technology and e-readiness, but a bit below regarding digital behavior in everyday life. Has a high level of online access and security in the use of digital but lower usage in everyday life.

Usage pattern in relation to library offers: A "superuser segment" in both respects.

Education level and employment: The segment is across multiple employment groups and education levels.

Where is the segment especially inspired for use: The library's website, friends and acquaintances, and the library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes wide range. Could wish for more offers regarding e-books and audiobooks.

Recommendations:

- Focus on the spread of knowledge of several of the services
- Focus on the development of services with more material
- Focus on services with wide content in entertainment and experiences
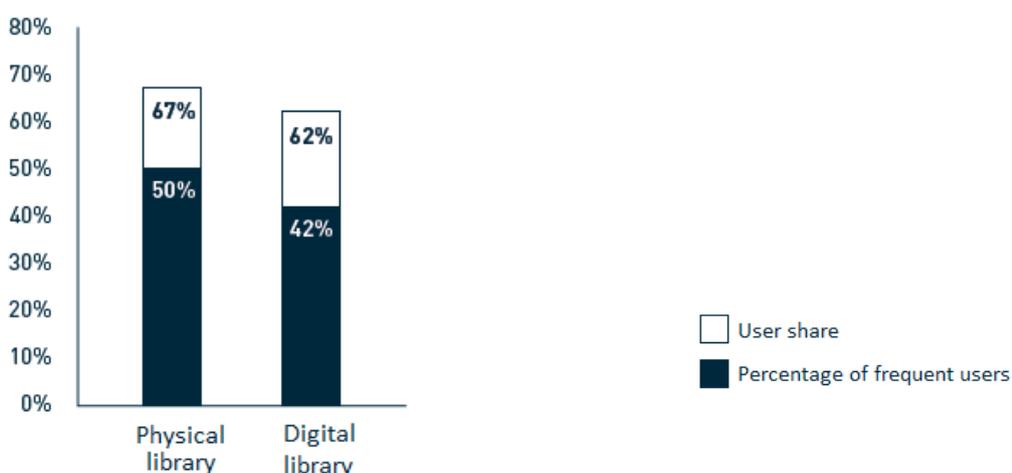
THE CULTURE-CONSUMING WOMAN

Uses both the digital and physical libraries relatively frequently. She uses it especially for entertainment and experiences and rather in tablet format than via computer. She could wish for more offers regarding audiobooks and e-books.

- Is primarily 50 years or more
- Is a frequent library user both physically and digitally
- 43% is a pensioner or a on early retirement. 27% are functionary employed
- 55% primarily use the library's digital services for entertainment and experiences

Digitization profile: Located close to the average or slightly below the three digitization parameters.

Usage pattern in relation to library offers: Score high in relation to physical library, which means that she often uses it and has a positive view of the physical library. She is significantly lower compared to the use of the digital library.

Educational level and employment: Primary retirees and functionary employed with very different educational backgrounds.

Where is the segment especially inspired for use: The library's website, friends and acquaintances, and the library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes wide range and inspiration. Could wish for more offers regarding e-books and audiobooks.

Recommendations:

- Focus on services suitable for the tablet format
- A focus on services that inspire new things you would not have found yourself
- Focus on the dissemination of general knowledge of the services
- Focus on developing services with more material with regard to e-books and audiobooks
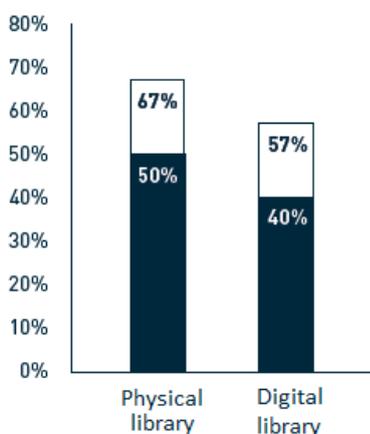
THE SUPER DIGITAL MAN

He is relatively young and very digitally oriented in his everyday life, but rarely uses the library's digital offers. He becomes limited because he does not think the offer and content are interesting enough. He is also the most critical when it comes to evaluating the library's dissemination of the digital offers.

- Is primarily between 15 and 39 years
- 34% is a student
- 32% are employed or similar
- 55% use the digital library less often than once a year
- Is the most skeptical segment in the assessment of the library's dissemination of digital services

Digitization profile: Highest scores both in terms of digital technology, digital behavior in everyday life, and e-readiness, and thus are characterized by both spending a lot of time at a computer or the like, having many digital devices as well as being safe and experienced in relation to the use of it.

Usage pattern in relation to library offers: Scores relatively low compared to the physical library, close to the average in terms of the use of digital offers.

**Education level and employment:** Many students and functionary employed.

Where is the segment especially inspired for use: Via the library's website and the library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Emphasizes wide range. Wishing more e-books and online gaming as well as digital music service.

Recommendations:

- Focus on the dissemination of knowledge about the library's digital services and their use
- Focus on services with knowledge and learning as purpose
- Focus on offers like online gaming
- Targeted dissemination against this group, which is highly critical of the library's current dissemination of digital offers

THE SUPER DIGITAL WOMAN

Is frequent user of the digital library. She is relatively young and uses the services for several different things, including entertainment and experiences as well as knowledge and learning. She uses both the services in her spare time, but also in connection with study and work. She emphasizes that the digital services also have a deep selection of niche content, and she could wish for more deals with audiobooks and e-books.

- Is primarily between 15 and 29 years
- 55% of this segment has completed a long higher education program
- 46% are students
- 20% use the library's digital services in connection with work or study
- 35% primarily use the library's digital offers via smartphone or tablet

Digitization profile: Is extremely high on all three digitization parameters.

Usage pattern in relation to library offers: High usage of the library's digital services, but also high scores in general terms with the physical library.

Education level and employment: Around half of the segment are students. A smaller proportion of functionary employed. The young woman is the segment with the highest level of education. 54% have completed higher education.

Where is the segment especially inspired for use: Via the library's website, friends and acquaintances, and the library staff.

Wishes for content and what is essential for a culture service (in addition to user-friendly operation and good overview): Wishing more e-books and audio books, as well as personal library profiles.

Recommendations:

- An effort that tries to spread awareness of the services
- Is particularly interested in services such as bibliotek.dk and services with audiobooks and e-books
- Focus on broad content services
- Development of services with more material
- Focus on services with knowledge and learning as purpose – services relevant to study and work
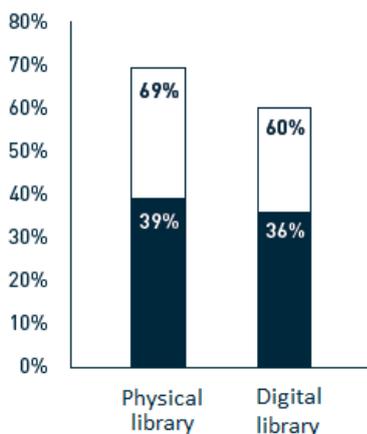
4.3. PLACEMENT OF SEGMENTS IN KEY AREAS: LIBRARY USE AND DIGITALIZATION

Two figures summarize the main purpose of the study:

1) To map the segments' use of the digital library in relation to their use of the physical library,
2) Their degree of digitization as a whole.

Figure 18 shows the relationship between the user share of physical library offers and digital library offers in the eight segments, while Figure 19 shows the relationship between the segments digitization degree as a whole and their use of the digital library.

The figure clearly shows that there is a close connection between physical and digital library use: those segments that have a high proportion of physical library users also have a higher percentage of digital library users.

The highest proportion of both physical and digital library users is the female parent, the super digital woman, the male culture-consumer and the female culture-consumer. These all have a user share above 50% of the segment. Common to these is also that the proportion of physical library users is slightly higher than the percentage of digital library users, about 5 percentage points. The analog man has achieved the lowest user share both regarding the physical and digital library. On the other hand, the analog woman has a slightly higher proportion of physical library users than the proportion of digital library users. The super digital man stands out by having a higher proportion of digital library users than physical library users.

Figure 19 shows the relationship between the segments' use of the digital library as well as their digitization in total: The two analog segments differ significantly by being very little digital and having a low use of the digital library. There is no significant difference between analog women and analog men. The super digital man stands out by being the most digital segment, but at the same time has a relatively low use of the digital library. The super digital woman is roughly as digital as the super digital man, but has a significantly higher use of the digital library.

The male and female parents are also relatively digital and at the same time have a high use of the digital library. The male culture-consumer has a high use of the digital library, but is a bit less digital than the parents and the super digital segments. The female culture-consumer is significantly less digital than the male culture-consumer and has a slightly lower use of the digital library.

FIGURE 18: **Segments' percentage of digital and physical library users.**
Library users are defined as citizens who use the library more than once a year.
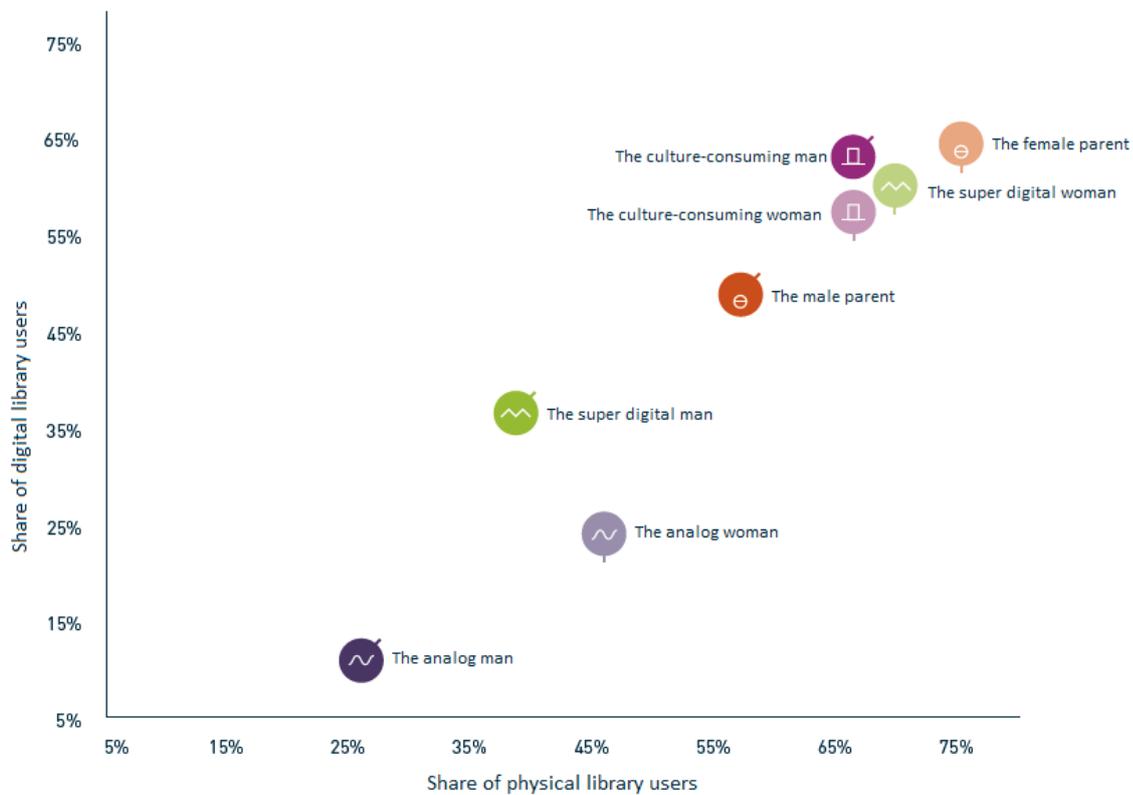
FIGURE 19: Segments average score on digital library usage dimensions and digitization as a whole.
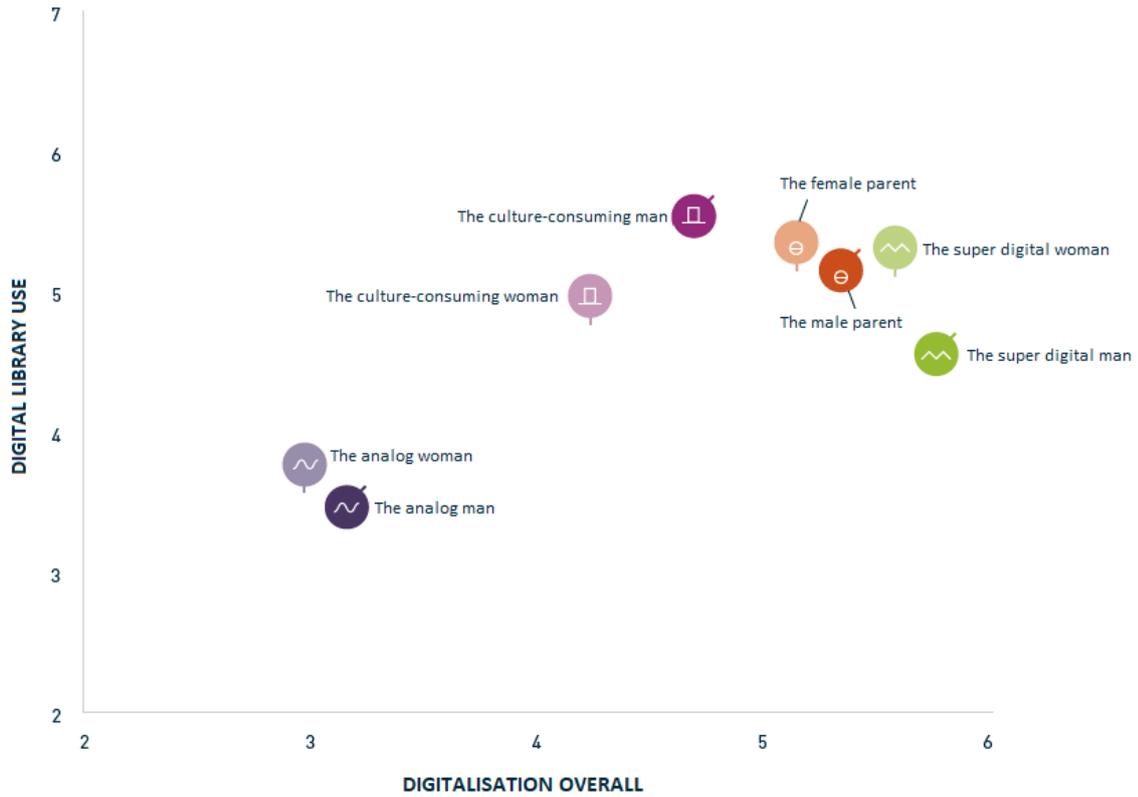
Figure explanation: Digital library usage is an overall measure of usage, as well as to the degree one thinks that digital use can replace physical library usage. Digitization as a whole is an overall goal of digital behavior in everyday life, digital security and assessment of whether digitization is considered a positive or negative development as well as digital access. Both goals are scaled from 0 to 10.

FIGURE 20: Segments' size as proportions of the adult population (citizens aged 15 and over).
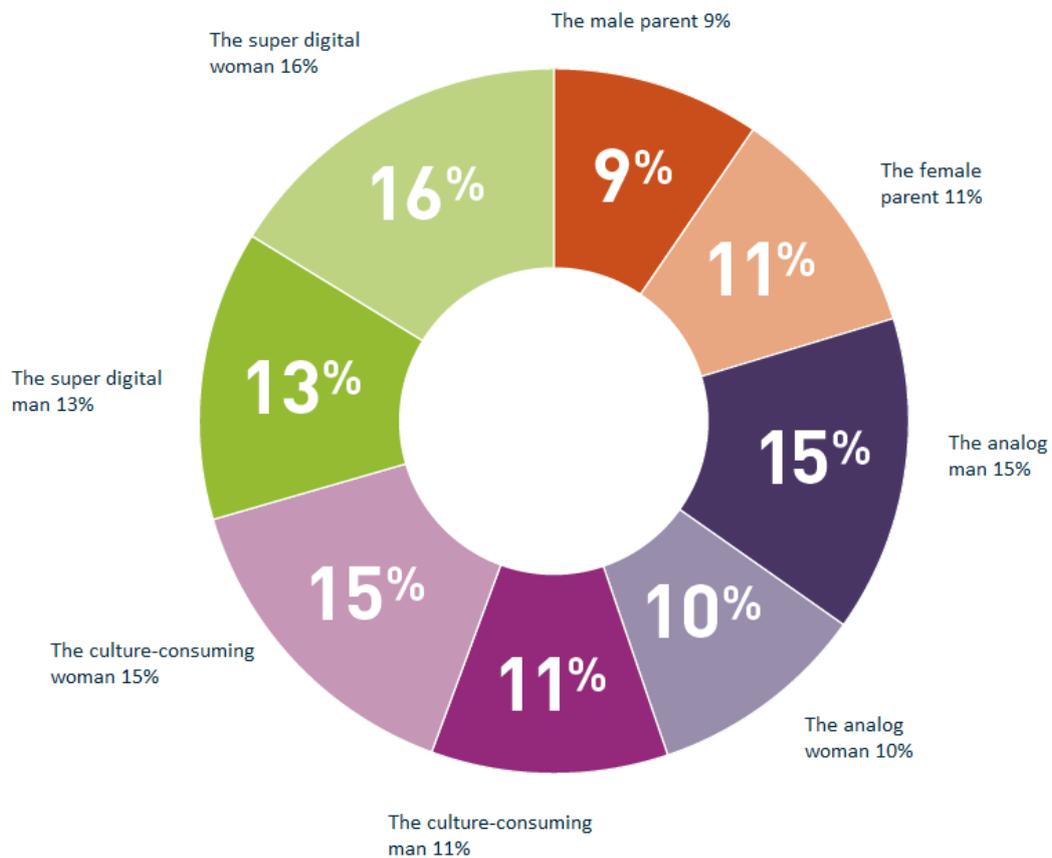
4.4. SIZE OF SEGMENTS

The segments constitute roughly equal parts of the Danish population. The segments proportion are more precisely shown in Figure 20 above: The super digital woman is the largest segment. The male parent is the smallest segment. If you look at the segments across the genders, the parents are the smallest group, collecting 20%. The super digital, on the other hand, are the largest group, collecting 29%. All in all, however, the segments are relatively evenly distributed.

5. SEGMENTS USE OF THE DIGITAL LIBRARY OFFERS

In this section, the usage patterns of the segments are examined in relation to the libraries digital offers. It is crucial for the library to know the segments' more detailed patterns of use to make targeted offers to them and to know where to find and inspire them. In order to reach the segments, it is important to look at:

- The proportion of frequent users among the segment
- Which library services they are familiar with
- Where they have been inspired to use library services
- Your primary purpose of using the digital library offers
- In what context and on which unit they primarily use the offers
- What other cultural services they use

These relationships will be explained in the following section. Finally, an additional analytical layer is added in the form of a distinction between the platform-conscious and the entertainment-focused users.

5.1. THE SHARE OF FREQUENT USERS

The following tables provide a more detailed overview of how many so-called frequent users are within each segment of the digital and physical libraries. Frequent users are defined here as users who use the library several times a week or month and are thus a kind of core users for the libraries.

FIGURE 21: Percentage of frequent users of the digital library across segments.
The percentages are the proportion that has indicated to use the digital library one or more times a week or month.

Segment	Percentage
The culture-consuming man	42%
The female parent	41%
The culture-consuming woman	40%
The super digital woman	36%
The male parent	28%
In total	28%
The super digital man	18%
The analog woman	15%
The analog man	6%
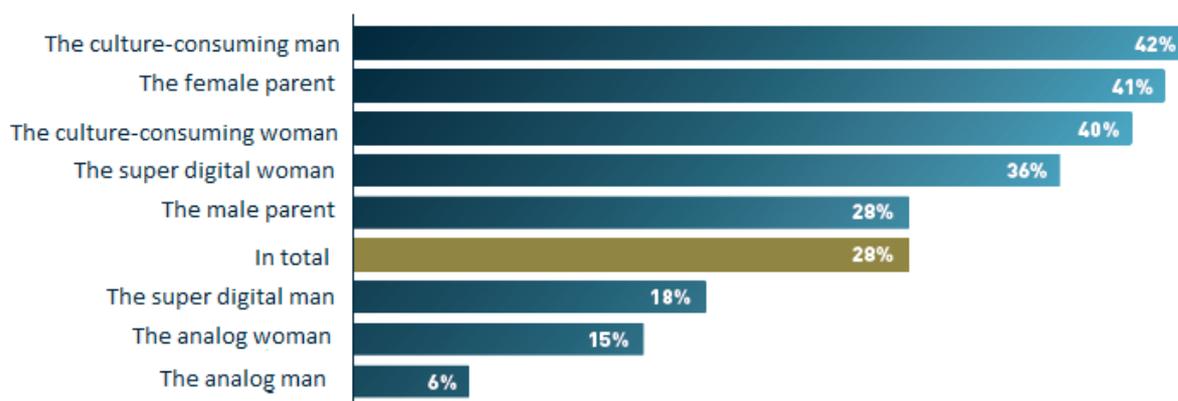
FIGURE 22: Percentage of frequent physical library users across segments.
The percentages are the proportion that has indicated to use the physical library one or more times a week or month.
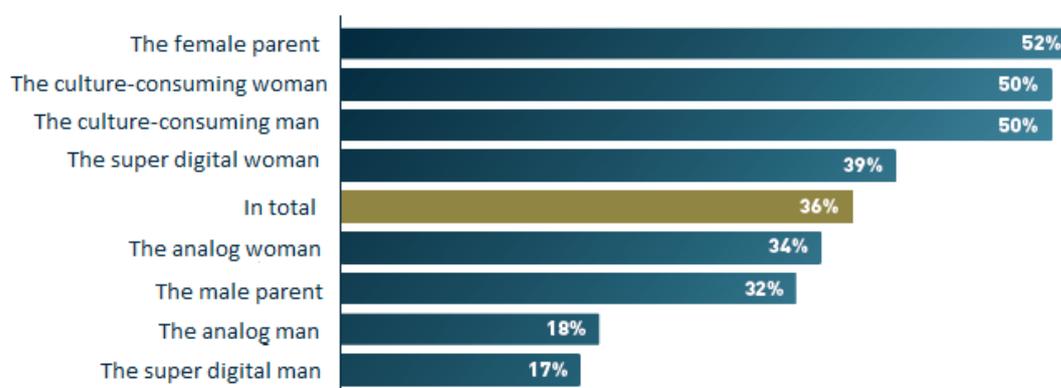
Particularly the parents and the culture-consuming segments as well as the super digital woman have high proportions of frequent users of the digital library. Here you especially find people who use the digital library find one or more times a month.

The analog male, the analog woman and the super digital man have far lower proportions of frequent core users.

The proportion of frequent digital users differs for most of the segments from the proportion of frequent users of the physical library, although as mentioned, there is a close connection between the use of the physical library and the digital library.

The proportion of frequent physical library users can be seen in Figure 22. Again, the female parent and the culture-consuming male and female have the highest proportion of frequent users. The analog segments, however, have significantly higher percentage frequent users of the physical library than of the digital, while the super digital man conversely has the lowest proportion of frequent physical library users.

5.2. KNOWLEDGE FOR THE LIBRARY SERVICES

The users of the digital library have been asked which of the digital services they know. Knowledge of library services is of course a crucial factor in using the library's digital offers. In the survey, there is also a close connection between how often you use the digital library and how many services you know.

Generally, knowledge of services is highest in the segments that are most digital, while at the same time using digital library services frequently. Among the segments of the super digital woman as well as the female parent and the culture-consuming man and woman, the is the largest knowledge of the services.

Among the segments the analog male and female, 40% and 36% indicates that they do not know any of the mentioned services. Response allocations are shown in Figure 23.

FIGURE 23: What services do you know across segments.
The question is only asked for respondents who have answered that they are using the digital library once a year or more often.

	The male parent	The female parent	The analog man	The analog woman
Litteratursiden.dk	9%	15%	4%	17%
Bibliotek.dk	58%	69%	46%	39%
Filmstriben	48%	41%	12%	9%
eReolen (incl. audio books)	52%	60%	9%	24%
Biblioteksvagten	11%	13%	7%	9%
Bogbidder	1%	1%	1%	1%
Biblo	6%	11%	3%	1%
Don't know any of the above	10%	10%	40%	36%

	The culture-consuming man	The culture-consuming woman	The super digital man	The super digital woman
Litteratursiden.dk	13%	21%	18%	28%
Bibliotek.dk	60%	59%	65%	77%
Filmstriben	36%	26%	59%	68%
eReolen (incl. audio books)	57%	59%	43%	61%
Biblioteksvagten	15%	13%	12%	14%
Bogbidder	2%	3%	0%	3%
Biblo	2%	2%	9%	7%
Don't know any of the above	7%	12%	11%	3%

There is a significant difference in which of the library's digital services the segments know. Across the segments, the knowledge of bibliotek.dk is greatest. Among all segments, a large proportion is familiar with this service, and even the analog male and female knows it. Many also know Filmstriben and the eReolen, however, the knowledge of the analog male and female is still lower than the other segments.

Litteratursiden.dk also has relatively high shares, which is especially among the super-digital segments.

At the other end lies the service Bogbidder. The knowledge of this is between 0-3% in all segments, the absolute lowest. There is no systematic difference between the segments in terms of knowledge of this service.

5.3. INSPIRATION FOR USE OF THE DIGITAL LIBRARY SERVICES

There are differences in how the segments have been inspired to use the library services, and thus where from they know the services. Libraries can use knowledge about where the segments have been inspired to organize systematic material that can inspire the individual segments in the same way. The distribution of where the segments have been inspired are shown in Figure 24.

Across the segments, it is clear that the library's website is a source of inspiration for most users. Next, friends, acquaintances and family are an important source of inspiration. For many users, the library staff is also an important source of inspiration, especially the analog woman. Very few users have been inspired via Facebook as well as via posters and big screens.

The analog segments and the culture-consuming segments look more than the other segments at local newspapers and ads.

The library can use this knowledge to target new inspiration to the users. It is clear that the library's own website and staff are an obvious place to engage in broadening the knowledge of the digital services broadly. At the same time, however, it is also clear that the distribution in Figure 24 reflects the digital strategies that the library has already taken. When very few users respond that they have been inspired via Facebook, this doesn't mean that social media, including Facebook, can't be an obvious channel for libraries in the future.

FIGURE 24: The main source of inspiration across segments.

The question is only asked for respondents who have answered that they are using the digital library once a year or more often. It was possible to put more crosses. The percentages therefore do not reach 100%.

The male parent
- 43%
- 10%
- 10%
- 8%
- 19%
- 25%
- 5%
- 5%

The female parent
- 55%
- 6%
- 7%
- 5%
- 21%
- 27%
- 5%
- 5%

The analog man
- 39%
- 7%
- 5%
- 3%
- 11%
- 8%
- 20%
- 2%

The analog woman
- 37%
- 3%
- 1%
- 5%
- 27%
- 22%
- 14%
- 1%

The culture-consuming man
- 50%
- 12%
- 5%
- 13%
- 20%
- 22%
- 11%
- 2%

The culture-consuming woman
- 52%
- 4%
- 3%
- 6%
- 21%
- 30%
- 9%
- 2%

The super digital man
- 36%
- 9%
- 8%
- 4%
- 15%
- 23%
- 3%
- 7%

The super digital woman
- 52%
- 6%
- 8%
- 5%
- 15%
- 36%
- 4%
- 4%

IN TOTAL
- 48%
- 7%
- 6%
- 7%
- 19%
- 27%
- 7%
- 4%

Legend:
- The library website
- Other public websites
- Facebook
- Newsletters
- Library staff
- Friends, acquaintances, family, ect.
- Local newspapers and ads
- Posters and screens

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5.4. PRIMARY OBJECTIVES AND COMPARISON OF USE OF DIGITAL LIBRARY SERVICES

When the library understands the segments usage pattern, it may be relevant to look at what the segments' primary purpose of use with the library is, and in what context the segments use the digital services and on which device.

First, the users of the digital library have been asked for their primary purpose when using the digital services. This is shown in the figure below: The figure shows that entertainment and experiences are clearly the purpose most users indicate for their use of the digital services. Knowledge and learning also play a crucial role especially for the super digital man and the analog man. Child-related offers are primarily a purpose for the two parent segments.

It is worth noting that this question only allowed one answer, namely one's primary purpose of use. For the vast majority, therefore, there will be a number of different uses, and thus the proportion of, for example, the super digital man who uses digital services for knowledge and learning will be even higher than 48%.

FIGURE 25: Primary use of digital services.
The question is only asked for respondents who have answered that they are using the digital library once a year or more often.
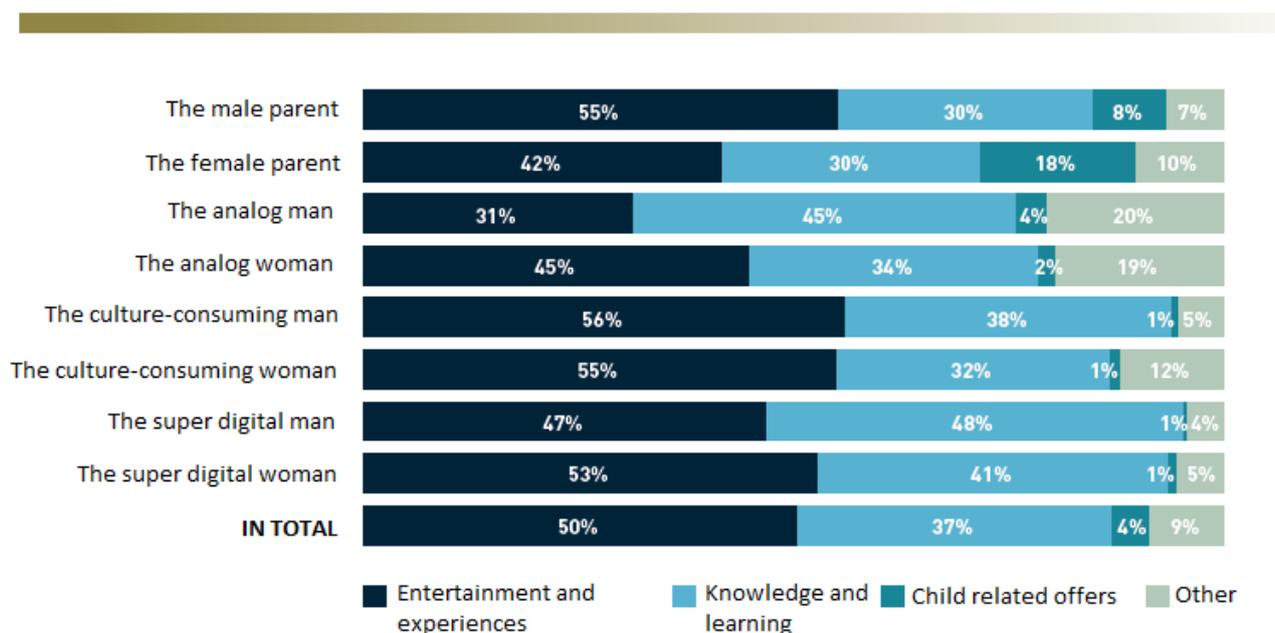
Similarly, the user of the digital library has been asked in what context they primarily use the digital services. Figure 26 below shows the context in which the segments use the library's digital services.

Most people answer that they use the library's services alone at home. However, a significant proportion of the super digital men and women use the digital services at work or study. The segments, which mostly use the digital services for socializing with family and friends, are the two parent segments. Among the analog segments, some use the digital services when visiting the physical library. However, the overall impression is that the vast majority of the digital services are used alone at home.

Users have also been asked on which digital devices they primarily use the library's digital services. The distribution of this question is shown below.

FIGURE 26: In what connection do you primarily use the library's digital services across segments.

The question is asked only to respondents who have indicated that they use the digital library annually or more often.

	Alone at home	At work/study	Socializing with family and friends	Associated with transportation	When visiting the library	Other
The male parent	58%	10%	12%	8%	6%	6%
The female parent	63%	9%	7%	5%	11%	5%
The analog man	67%	4%			11%	17%
The analog woman	62%				22%	13%
The culture-consuming man	71%	3%	5% 2%		11%	8%
The culture-consuming woman	73%	3%	2% 4%		9%	9%
The super digital man	59%	20%	4% 4%		7%	6%
The super digital woman	62%	21%	3%	6%	5%	3%
IN TOTAL	65%	10%	5%	4%	9%	7%
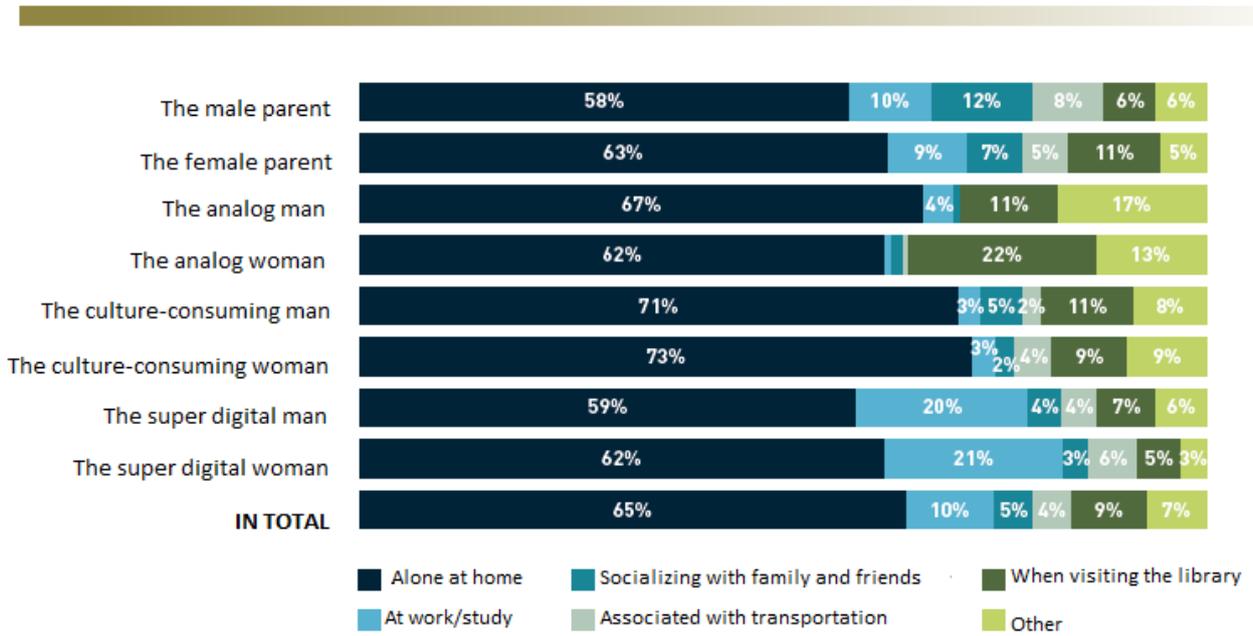
FIGURE 27: On which device do you primarily use the library's digital services across segments.

The question is asked only to respondents who have indicated that they are using the digital library annually or more often.

	Computer	Smartphone	Tablet	E-bookreader	Other
The male parent	52%	25%	18%		4%
The female parent	42%	27%	27%		3%
The analog man	64%	7%	18%		9%
The analog woman	79%		3%	6%	12%
The culture-consuming man	62%	8%	28%		
The culture-consuming woman	43%	11%	39%	3%	4%
The super digital man	70%	16%	9%		4%
The super digital woman	64%	17%	18%		1%
IN TOTAL	57%	16%	23%		4%
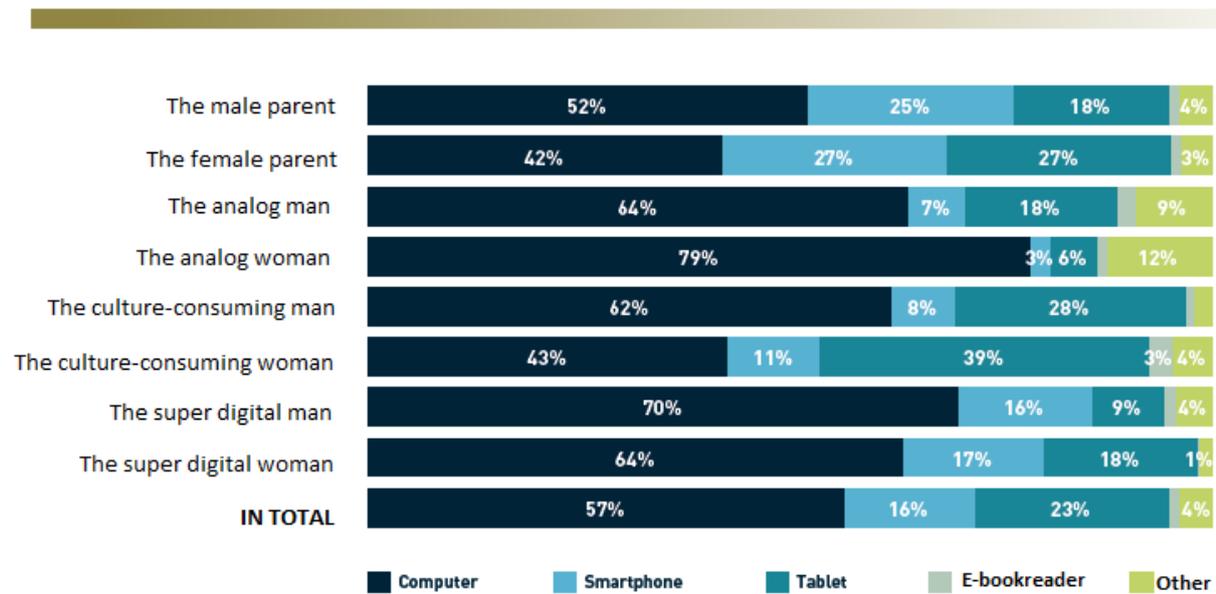
Most people primarily use the library's digital services via computer. It is especially the two parent segments that use the library's services via smartphone. Especially the culture-consuming women and man and the female parents use a tablet when using the library's digital services. There is a big difference between the format of the digital devices and thus also how to design user interface for them. This is important for the library and library staff to be aware of in their development, but also their dissemination of the digital services and how to use them.

Again, it is important to remember that the figure shows only the users' primary device and that many citizens want to use multiple devices. Thus, for example, it is likely far more than 25% of the male parents who use the digital services from their smartphone. There is also a difference in the extent to which the segments participate in digital communities. Here it is especially the super digital man and woman who participates in debates, social groups and other online communities, and experiences contact with other people when communicating with others over the Internet. Thus, the super digital male and female segments interact with others over the internet and form part of communities here. Contrary to this, the analog man and woman who participate very little in online forums and, to a very low degree, feel connected with others when they communicate over the Internet. This difference in the participation in digital communities is important for the libraries' work with the segments. Digital communities are an obvious focus area.

The large proportion of the segments of the super digital man and woman participating in social groups online and feeling a contact with others in connection with this, provides an excellent starting point for work or attempts at both the dissemination and use of digital library services in connection with digital communities.

FIGURE 28: Two key dimensions for digital communities across segments.
The percentage is the proportion that has responded to a large extent or to some extent to the statement.

Participates in debates, social groups and other online communities:
- The male parent: 64%
- The female parent: 64%
- The analog man: 34%
- The analog woman: 48%
- The culture-consuming man: 62%
- The culture-consuming woman: 59%
- The super digital man: 76%
- The super digital woman: 80%

Feeling connected to other people when communicating with others by using the Internet:
- The male parent: 33%
- The female parent: 35%
- The analog man: 7%
- The analog woman: 5%
- The culture-consuming man: 23%
- The culture-consuming woman: 16%
- The super digital man: 45%
- The super digital woman: 44%

■ Participates in debates, social groups and other online communities

■ Feeling connected to other people when communicating with others by using the Internet

Qualitative findings: For several of the participants, the local library is the natural starting point for cultural services, for children, adults and the elderly. It is perceived as a place that has potential to bind the community together.

BORIS ZETTERLUND SENIOR ADVISOR AT AXIELL GROUP

Will the digital library make the physical library redundant?

The physical library is a third room in society – not home, not a job. You do not have to pay or perform. This physical location serves as a haven for the users; In solidarity with others; For the individual's immersion and reflection; As a meeting place; And a source of inspiration. There are indispensable qualities in the physical presence of other visitors and the library's physical space.

Imagine a group of children and parents who participate in a book reading from a librarian. It is digitally possible to correspond, but just the fact that Second Life failed, points out how insufficient the digital is in itself. After more than 20 years of internet and several years of broadband, it does not significantly reduce the number of visitors to the library. And I am convinced that it can also increase dramatically if we manage to use the digital resources in the local area. For example, I believe in digital distance learning (MOOCs) as a supplement to current teaching. I have passed a course in "Film Noir" at Ball State University, Indiana. Fantastic entertaining! But life and people are complicated. We need more than a digital life.

How should one think about the connection between the physical and digital library?

Both agencies will create a demand for the other service. It is a very big challenge to create a connection that makes sense – that makes a difference. A connection with a fruitful dialogue with library staff gives a stronger impression than a good online purchase.

At the library, activities will increase and develop to an extent we have only seen the beginning of. Many of these activities will be community-driven, and fellowship will strengthen the local community. The library is the engine and the arena for this. The digital interaction around each activity can differ. Imagine a poetry reading – "I dystopins träskmarker" – by young local poets, or a drawing course "à la romance noir". Before the event, social media (of the library and participants) are used; Inspirational sources are listed on the library website and the library's catalog; The calendar is being updated. The event is broadcast; A chat room becomes available; And the social media are used. After the event, the reading or the course is now documented (video, pictures) – it will be meta-tagged, archived and published – published for future enjoyment. The digital interaction is here an integral part of each activity. Note that with the user production that libraries initiate, each library becomes a digital media producer. Every day.

How should the digital library create added value so that it doesn't just offer the same as the physical?

The digital library should:

- Guide to relevant quality sources. The user must be convinced that the digital library services guide the user to the best on the web – with depth (bespoken for the segment) and quality

- Include interactive services ranging from developing language skills to how to take the best selfie (photography, self-experience, gender research, marketing, etc.)
- Provide local residents with the ability to contribute, publish and distribute instances. Crowdsourcing e.g. through projects on local neighborhoods and its inhabitants. Or crowdsourcing, where citizens each year highlight the best photos of their local communities (see the library, the municipal websites or the local newspaper). Possibility for citizens to present "my music", "my poems", "my pictures", "my stories"

How should the digital library create relevant offers that offer something other than what we see in the commercial distribution channels? What qualities should you focus on?

By being the third room digitally – locally. Focusing on key issues: promoting reading – lifelong learning – creative and democratic citizens. Sometimes there is the mistake of establishing a national library service addressed to the end user. It may very well have high qualities and an attractive interface. However, for most people, it will be perceived as something anonymous you only use when nothing else attracts. In addition, the focus on the central end-user service causes a castration of the local area. In the worst case, you also use local resources for the central end-user service. I am convinced that the core efforts can create efficiency and synergy, but the services must be delivered locally. This allows the staff to develop a relationship with the community and the citizens. They can gather knowledge about their local digital users and service development in dialogue with them. Invite them to the physical world. In addition, these users can actively contribute to the library services.

It is a highly naive idea that you can copy Google's and Facebook's dominance of the citizen with the national library services targeted directly to end users. There is very little room for that. The channel is narrow. It is with "the true encounter" that libraries can make a difference. A meeting that makes sense. It can only be arranged locally. As a local library, you are closer to the citizens of the community than any social media may be. Physical and digital. Take advantage of it! Development of reading skills. Development of digital skills (not only for digital resources). Aspirate people's creative side. Makes people to politically-oriented citizens. There the library will make a difference.

5.5. WHAT OTHER CULTURAL SERVICES DOES THE SEGMENTS USE

One last usage pattern that may be relevant to the segments is what other cultural services they use. This can be crucial for understanding citizens' reference points and expectations for digital services. Citizens do not necessarily distinguish between the library's digital and more commercial services but use both of them. Thus, the libraries must relate to other cultural services as well as their offers in the organization and arrangement of their offers. What services you use are shown in the figure on the next page.

It appears that there is a huge difference between the segments' use of digital cultural services. Throughout all, DR TV is the culture service that most people use. DR TV, like the libraries digital services, is easily accessible and free, and the large user share of this service shows that there is potential for expansion of such services.

However, the analog woman and analog man use very few digital cultural services in addition to DR TV, and large units in both segments respond that they do not use any of the cultural services. The culture-consuming woman and man use eReolen in addition to DR TV. Among the two parent segments and the super digital segments, many uses Netflix, and among the super digital segments, many additionally use HBO. Among the parents and the super digital woman, there are many more who use eReolen. In addition, it can be noted that as you dive into cross-segment responses and look at the connection between the use of eReolen and Mofibo audio and e-book services, there are some positive overlaps between these. There are around 4% in the study who use Mofibo and 15% who use eReolen. It is not that the citizens generally use either eReolen or Mofibo, but on the contrary, there is a tendency to use them both. The two services thus tend to complement each other and increase the overall use of audio and e-books.

5.6. TWO BEHAVIORAL TYPES: THE PLATFORM-CONSCIOUS AND THE ENTERTAINMENT-FOCUSEDED

In some contexts, reference is made to the distinction between the platform-conscious users and the more entertainment-focused users. This approach is used in the qualitative research "Digital Strategies for the Future".

The difference can be described as the entertainment-focused user tends to look for some specific material that he or she wants and less aware of which platform he or she gets from, but simply go for the platform that provides easy access to the widest range.

Conversely, the platform-conscious behavior type will go more for a specific platform that he builds a "trust relationship" to; Specific services that he or she trusts and follows their selection, and regularly visits to see what new material is recommended. The platform-conscious therefore emphasizes the guidance-oriented aspect of cultural services and appreciates a set-up that inspires.

This difference in usage pattern is expressed in several places, for example, what is emphasized by a good cultural service: whether it is wide content or new inspiration. The difference can also be illustrated by the difference between Filmstriben and Netflix. In one place, one finds the wide and popular selection that suits the whole family, while the other place offers a narrower range that provides space for, for example, non-commercial offers. This difference is also expressed when looking at the knowledge and assessment of Filmstriben, compared with the use of Netflix. As mentioned in section 3, experience shows that knowledge and usage often go hand in hand, so the question about if you know Filmstriben and if you use Netflix, is relatively comparable.

FIGURE 29: Which of the following cultural services you use across segments.

It was further possible to answer Wimp and Storytel, but due to small proportions, these are sorted out.

The male parent
- Netflix: 48%
- HBO: 14%
- Spotify: 25%
- DR TV: 58%
- TV2 Play: 16%
- Mofibo: 5%
- eReolen: 16%
- None of the above: 18%

The female parent
- Netflix: 55%
- HBO: 13%
- Spotify: 23%
- DR TV: 62%
- TV2 Play: 23%
- Mofibo: 6%
- eReolen: 21%
- None of the above: 12%

The analog man
- Netflix: 10%
- HBO: 3%
- Spotify: 3%
- DR TV: 43%
- TV2 Play: 5%
- Mofibo: 1%
- eReolen: 2%
- None of the above: 50%

The analog woman
- Netflix: 5%
- HBO: 2%
- DR TV: 38%
- TV2 Play: 4%
- eReolen: 2%
- None of the above: 55%

The culture-consuming man
- Netflix: 19%
- HBO: 7%
- Spotify: 13%
- DR TV: 71%
- TV2 Play: 12%
- Mofibo: 4%
- eReolen: 21%
- None of the above: 19%

The culture-consuming woman
- Netflix: 17%
- HBO: 4%
- Spotify: 9%
- DR TV: 54%
- TV2 Play: 11%
- Mofibo: 5%
- eReolen: 21%
- None of the above: 29%

The super digital man
- Netflix: 50%
- HBO: 21%
- Spotify: 38%
- DR TV: 49%
- TV2 Play: 18%
- Mofibo: 3%
- eReolen: 9%
- None of the above: 18%

The super digital woman
- Netflix: 62%
- HBO: 25%
- Spotify: 47%
- DR TV: 62%
- TV2 Play: 26%
- Mofibo: 6%
- eReolen: 25%
- None of the above: 8%

IN TOTAL
- Netflix: 34%
- HBO: 11%
- Spotify: 21%
- DR TV: 55%
- TV2 Play: 15%
- Mofibo: 4%
- eReolen: 15%
- None of the above: 26%

Legend:
- Netflix
- HBO
- Spotify
- DR TV
- TV2 Play
- Mofibo
- eReolen
- None of the above

FIGURE 30: Knowledge and assessment of Filmstriben as well as the use of Netflix across segments.
The questions about Filmstriben are only asked for respondents who have answered that they are using the digital library once a year or more often. Only this group is viewed – also on the question of using Netflix.

Segment	Like Filmstriben	Know Filmstriben	Netflix
The male parent	28%	48%	54%
The female parent	28%	41%	58%
The analog man	10%	12%	17%
The analog woman	8%	9%	4%
The culture-consuming man	26%	36%	20%
The culture-consuming woman	16%	26%	19%
The super digital man	29%	59%	53%
The super digital woman	41%	68%	62%
IN TOTAL	27%	43%	41%

■ Like Filmstriben   ■ Know Filmstriben   ■ Netflix
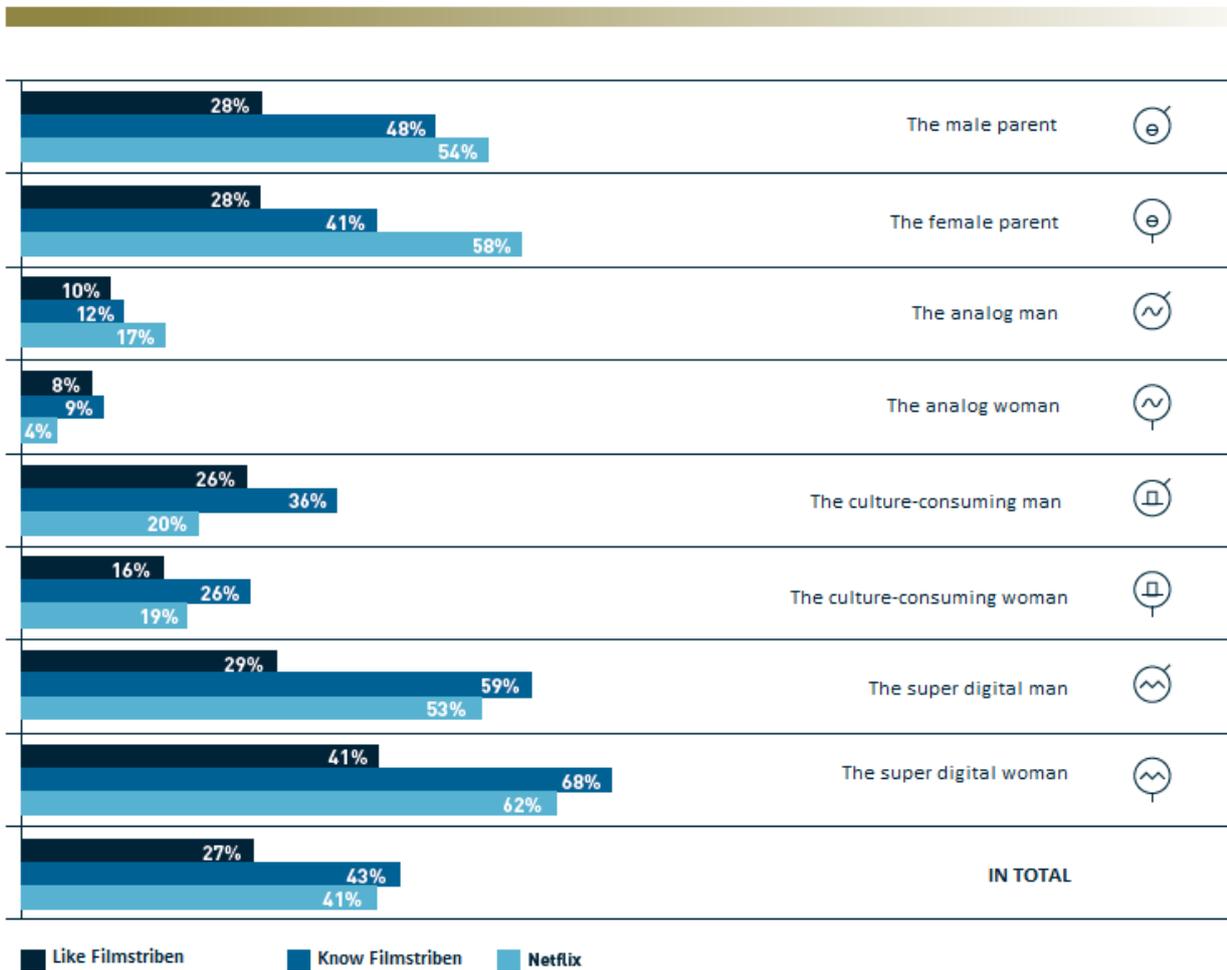
Figure 30 suggests that the male and female parents are the most entertainment-focused. In this segment, a lot is using Netflix while few know Filmstriben. Conversely, there is the culture-consuming woman and culture-consuming man, who are the more platform-conscious. For the culture-consuming man, there is a larger share that knows Filmstriben and likes it, than the proportion that uses Netflix. The analog male and female are very little digital and thus uses neither. For the super digital man and woman, the picture is more unclear. Here, many know Filmstriben and many use Netflix.

6. LIBRARY USERS' ASSESSMENT AND EXPECTATIONS TO THE DIGITAL SERVICES

This section focuses on citizens' attitudes in relation to the library's digital offers. This can further clarify how the segments experience the digital offers and the libraries' dissemination of these.

To provide a comprehensive overview of citizens' assessment of and expectations for digital offers, this is investigated in this section:

- What the segments think is important for a good culture service
- What digital offers the segments could the segments wish more of
- What conditions the segments experience as limiting their use of the digital offers
- The users' evaluation of a number of conditions regarding the libraries' dissemination of the digital offers

6.1. CENTRAL QUALITIES BY A GOOD CULTURAL SERVICE

Citizens have been asked what they think is important for a good cultural service. The responses to this are shown in Figure 31. Over a wide range, user-friendly operation as well as a good overview of the content of the service are clearly the most important characteristics across segments. Thus, all digital services, regardless of the audience they are targeting, should pursue these features to broaden widely. Wide selection is also an important priority for many, but to a much lesser extent to the analog man and woman.

The super digital man and woman stand out by emphasizing that a digital service should have a deep selection of niche content.

6.2. WISHING WITH REGARD TO CONTENTS

The segments have been asked what digital offers they could wish more of. This gives the libraries knowledge of what digital initiatives it may be relevant to invest in, in the future to get more users of the digital offers. Several of the things that citizens want, is already available, and thus it can contribute with knowledge about what libraries can emphasize when communicating the digital offers of libraries. The response distribution is shown in Figure 32.

FIGURE 31: What is important for a good cross-sector cultural service.
It was possible to put more crosses. The percentages therefore do not reach 100%.

The male parent
- 62%
- 53%
- 29%
- 45%
- 9%
- 32%

The female parent
- 75%
- 61%
- 39%
- 52%
- 6%
- 27%

The analog man
- 68%
- 40%
- 17%
- 30%
- 4%
- 16%

The analog woman
- 75%
- 41%
- 26%
- 23%
- 1%
- 9%

The culture-consuming man
- 68%
- 54%
- 26%
- 45%
- 11%
- 22%

The culture-consuming woman
- 76%
- 52%
- 35%
- 40%
- 4%
- 18%

The super digital man
- 55%
- 62%
- 35%
- 50%
- 21%
- 27%

The super digital woman
- 66%
- 65%
- 42%
- 56%
- 10%
- 26%

IN TOTAL
- 68%
- 54%
- 32%
- 43%
- 8%
- 22%

Legend:
- User-friendly operation
- A good overview of the content of the
- Possibility to get inspiration for things you would not have found yourself
- Wide range of content within all genres
- Deep selection of niche content within specific
- Quick access to new things

FIGURE 32: Which of the following digital offers could you wish more of?

It was possible to put more crosses. The percentages therefore do not reach 100%.

The male parent
- 9%
- 19%
- 17%
- 26%
- 26%
- 21%
- 16%
- 19%
- 15%

The female parent
- 12%
- 33%
- 4%
- 31%
- 29%
- 14%
- 11%
- 13%
- 9%

The analog man
- 7%
- 12%
- 6%
- 8%
- 5%
- 8%
- 14%
- 29%
- 28%

The analog woman
- 8%
- 20%
- 3%
- 7%
- 10%
- 4%
- 8%
- 27%
- 14%

The culture-consuming man
- 12%
- 23%
- 3%
- 34%
- 24%
- 15%
- 20%
- 20%
- 13%

The culture-consuming woman
- 11%
- 27%
- 3%
- 28%
- 23%
- 9%
- 11%
- 15%
- 10%

The super digital man
- 10%
- 18%
- 22%
- 24%
- 18%
- 20%
- 15%
- 17%
- 17%

The super digital woman
- 12%
- 30%
- 8%
- 37%
- 30%
- 19%
- 15%
- 12%
- 9%

IN TOTAL
- 10%
- 23%
- 8%
- 25%
- 21%
- 14%
- 14%
- 19%
- 15%

Legend:
- Digital librarian
- Personal library profil
- Online gaming
- E-books
- Audio books
- Digital music service
- Factual reference books
- Borger.dk
- E-boks/digital post

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As you can see, the analog segments have a greater interest in borger.dk, e-box and Digital Post than the other segments. It can also be seen as they want offers that helps them to handle and manage the public digital self-service solutions. This has been a central offer from the country's libraries for a number of years, through IT courses and introductions, guides and active participation in borger.dk campaigns. The female parent, the super digital woman and the culture-consuming woman are the segments that are most interested in a personal library profile. However, for all segments except the analog man, a personal library profile has a relatively large interest.

Online games and gaming are primarily a wish of the super digital man and the male parent, while the super digital woman and the female parent want to a little more e-books and audiobooks.

6.3. RESTRICTIONS FOR ADDITIONAL USE

A very central issue for users is what they experience prevents them from using the digital services more than they currently do. The distribution of this key issue is shown in Figure 33.

Over a wide range, most people find that the biggest limitation on their use of the digital library is lack of knowledge of the offers. At this point, the segments agree.

The analog man and woman, to a very low extent, perceive restrictions on lending of books as a limitation on their use, but for the other segments this is a relatively widely experienced limitation. It is primarily the super digital man and woman who finds that content and topics are not interesting enough. Fewer answer that concrete bad experiences are a crucial limitation across segments.

Qualitative findings: Several users say they lack knowledge about the library's many different offers and to remember that they exist. The lack of overview of the websites does not make it easier. In addition, there is a demand for offers that already exist, e.g. access to dictionaries and journals.

FIGURE 33: Which of the following reasons are the most crucial limitations on your use of digital library offers? It was possible to put more crosses. The percentages therefore do not reach 100%.

The male parent
- 49%
- 14%
- 18%
- 13%
- 24%
- 5%
- 12%
- 17%

The female parent
- 52%
- 11%
- 23%
- 16%
- 24%
- 4%
- 12%
- 20%

The analog man
- 51%
- 11%
- 14%
- 11%
- 14%
- 4%
- 10%
- 4%

The analog woman
- 51%
- 6%
- 18%
- 10%
- 9%
- 4%
- 9%
- 7%

The culture-consuming man
- 47%
- 13%
- 15%
- 13%
- 22%
- 4%
- 10%
- 22%

The culture-consuming woman
- 48%
- 7%
- 17%
- 11%
- 18%
- 4%
- 8%
- 18%

The super digital man
- 47%
- 24%
- 16%
- 13%
- 27%
- 6%
- 8%
- 22%

The super digital woman
- 48%
- 20%
- 23%
- 13%
- 28%
- 4%
- 12%
- 25%

IN TOTAL
- 49%
- 13%
- 18%
- 13%
- 21%
- 4%
- 10%
- 17%

Legend:
- Lack of knowledge about the offers
- Content and subjects are not interesting enough
- Lack of overview and complicated navigation
- Complicated login
- Lack of visibillity and marketing
- Concrete bad experiences
- The services dosn't give me enogh inspiration
- Limited loans

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6.4. USERS EVALUATIONS OF THE LIBRARY'S DISSEMINATION OF DIGITAL OFFERS

When looking at how the individual segments assess the library's digital services, there is a significant difference between the digitized citizens and the more analog.

Firstly, there has been a focus on the citizens' experience of the library's website in relation to the dissemination of the library's digital services. This is the platform where most people are inspired to use the library's digital services. Generally, there is a high proportion that agree that the library's website is good for this dissemination. However, the super digital man has a slightly lower proportion than most of the other segments that agree with this statement. All in all, the impression is that a large proportion of users believe that the library's website is good at communicating the digital offers.

A similar trend applies to the question of library staff's dissemination skills in relation to the library's digital offers. Again, it is a high share who consider that library staff are good at communicating the library's digital offers, more than 50% of all segments.

However, there is a slightly greater difference between the segments here. Again, the super digital man is significantly more critical than the other segments. The analog male and female as well as culture-consuming male and male parents are clearly the most enthusiastic about the staff's dissemination. Also in this survey, library staff receive positive feedback from their users and, overall, are assessed very positively in relation to their ability to convey digital library services.

However, as mentioned above, there are relatively large differences between the segments, making it among the most critical segment "only" 60%, who believe that the library staff are good at communicating digital offers, while among the most positive, 90%. However, for this reason, there may be reason to consider whether there is a tendency for some respondents to be affected by other positive experiences with library staff, and thus generally evaluating library staff positively and not only in their dissemination of digital offers.

If you value how easy the segments believe is to get competent guidance for dealing with the library's digital offers, the positive response rate is generally high without a big difference across the segments, with the exception of the super digital man who is a little more critical than the others. When it comes to the question of whether one can find what you specifically look for in the library's digital services, the positive responses are generally slightly lower than the previous statements. The picture also changes a bit so that the analog segments, which otherwise have a more positive evaluation on the other issues, are in the more reserved group. The analog man, analog woman and super digital man, therefore, experience less than the other segments to find what they are looking for in the library's digital services.

Looking at the percentage of the segment that positively indicates that they believe that the library gives access to more qualified selection and independent reviews, there are not a big difference between the segments. However, the super digital man separates himself by having a more cautious evaluation than the others.

Qualitative findings: Several of the participants who use the library's digital offers tells how they go directly to their local library's website to solve specific tasks, typically related to their physical use of the library. For example, to book, find or re-borrow a book.

It is not natural for users to access the library's e-resources, unless they know a specific offer. The idea of visiting e-resources to simply explore is strange too many.

FIGURE 34: Share that thinks that the library's website is good at communicating the library's digital offers.

Percentage that has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.

The culture-consuming man	88%
The culture-consuming woman	86%
The analog man	85%
The analog woman	85%
In total	81%
The super digital woman	79%
The female parent	79%
The male parent	77%
The super digital man	68%
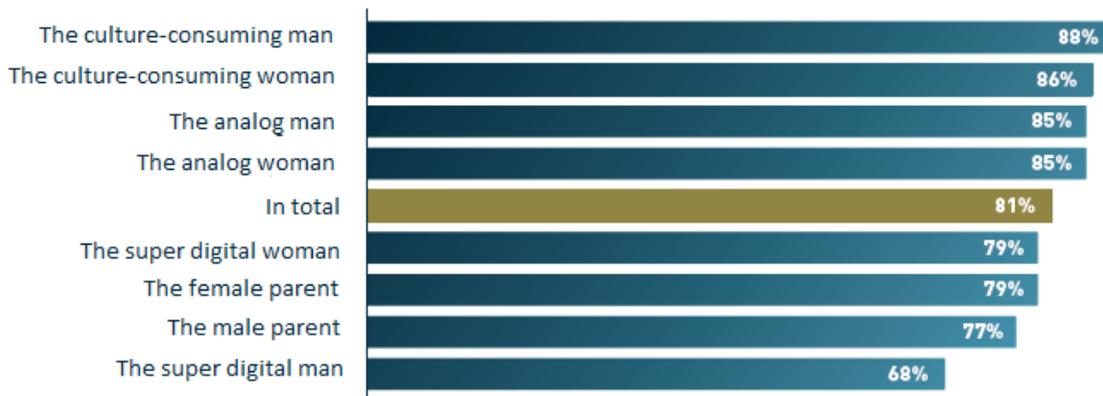
FIGURE 35: Share, who believes that library staff are good at communicating the library's digital offers.

Percentage that has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.

The analog man	90%
The analog woman	90%
The culture-consuming man	88%
The male parent	85%
The culture-consuming woman	85%
In total	79%
The super digital woman	72%
The female parent	71%
The super digital man	60%
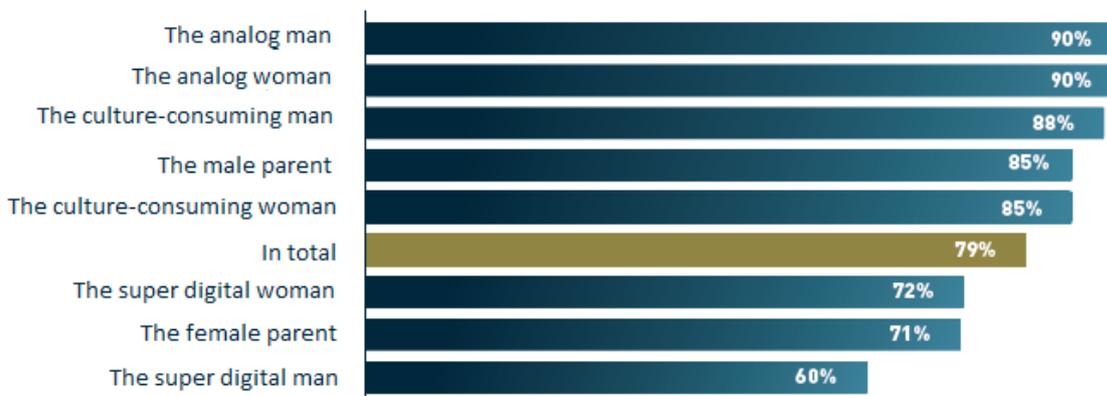
FIGURE 36: Share, who believes that it is easy to get personal and competent guidance regarding concrete handling of the library's digital offers. Percentage that has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.

The culture-consuming man	90%
The male parent	90%
The analog woman	89%
The analog man	88%
The culture-consuming woman	85%
In total	83%
The female parent	81%
The super digital woman	78%
The super digital man	69%
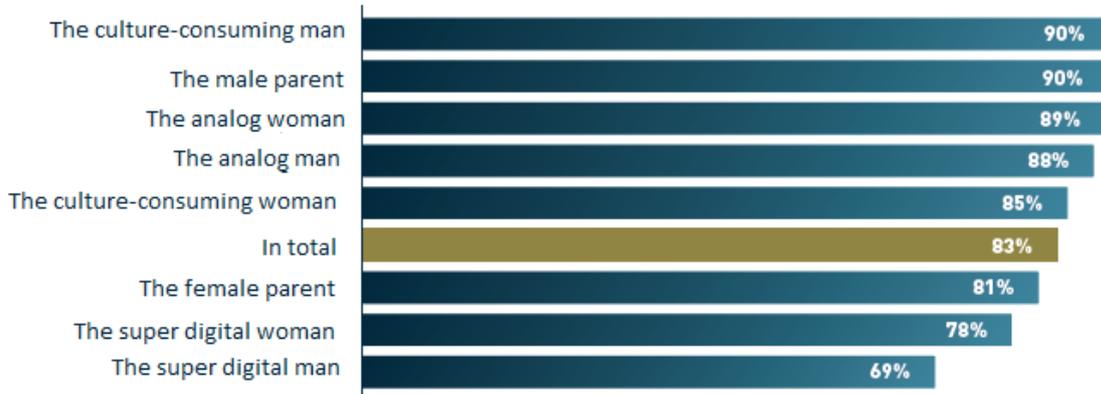
Qualitative findings: When users move on to one of the library's more specific digital platforms, it is often because they have been personally presented to them by others. There can be either someone in their circle of people who have tried the service themselves or librarians who help them get started.

FIGURE 37: Share that indicates that they are to some extent finding what they are looking for when they search specifically in the library's digital services. Percentage that has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.

The male parent	80%
The super digital woman	78%
The culture-consuming man	77%
The female parent	76%
The culture-consuming woman	74%
In total	74%
The analog man	64%
The super digital man	64%
The analog woman	64%
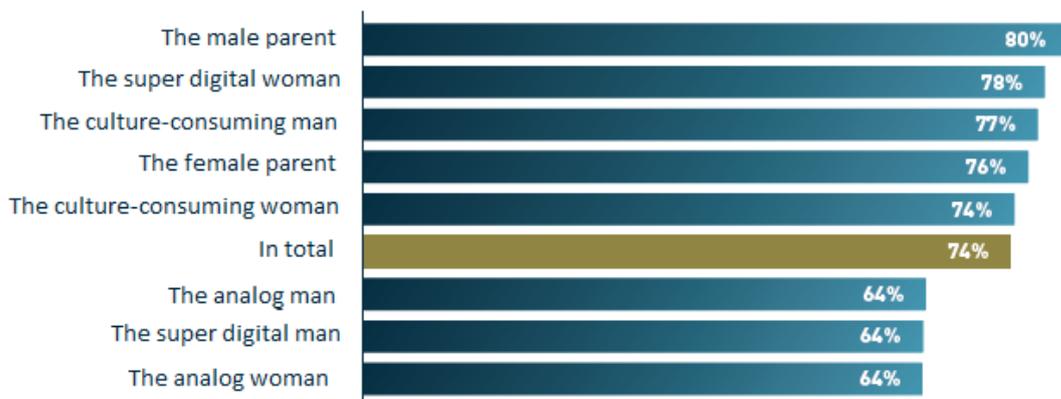
FIGURE 38: Share that believes that the library gives access to qualified selection and independent reviews. Percentage that has answered "To a large degree" or "To some degree" to the question. The question is only asked for respondents who have answered that they are using the digital library once a year or more often, or respondents who have answered that they are using the physical library once a year or more often.


The culture-consuming man — 88%
The culture-consuming woman — 87%
The analog woman — 85%
The male parent — 84%
In total — 82%
The super digital woman — 81%
The female parent — 81%
The analog man — 80%
The super digital man — 63%
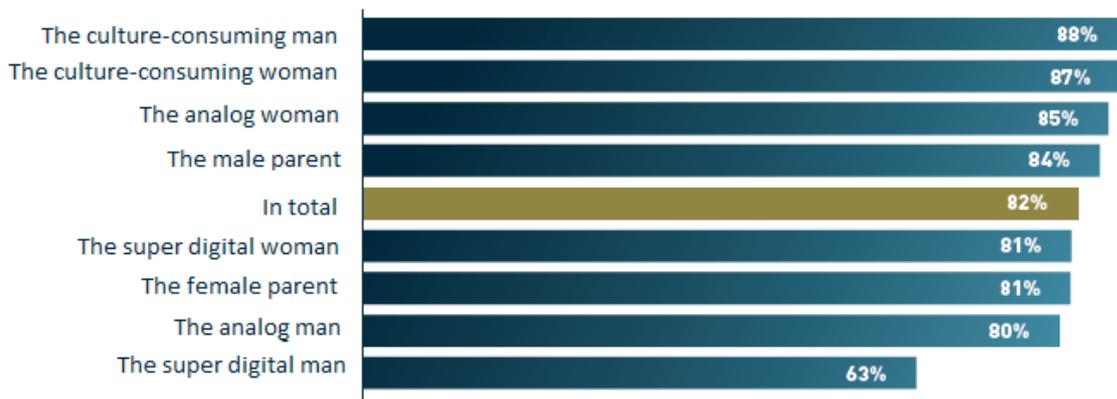
Food for thought: From 2017, libraries can offer their users access to over 16,000 digital comics through the Comic Plus service.

Fact: Only 19% of the citizens who already use the digital library get inspiration for the digital offers through the librarians.

7. DEMAND FOR DIGITAL AND PHYSICAL LIBRARY OFFERS

This section looks at the relationship between the digital and physical library offers. For example, if you think the library should invest more in the digital library and less on the physical or vice versa. Clarification of this can help clarify the issue of the relationship between digital and physical library services and help libraries understand which segments are positive towards digital library strategies and which are more reserved for this development. At the end, we take a look at the future library usage.

7.1. DIGITAL AND PHYSICAL OFFERS

First, it is relevant to look at whether the citizens believe that the digital library offers can replace their physical library needs. A total of 32% respond that digital offers can reduce their need to use physical libraries. There are very big differences between the segments, but within all segments, more than half of the citizens believe that good digital library offers do not significantly reduce their physical library needs. For the analog segments, this applies to a very low degree. Here, only 11% and 13% believe that good digital library offers reduce your need to use the physical library.

In general, one can thus conclude relatively disproportionately on this point: the digital library offers, according to the citizens, cannot replace the physical library.

Another question is, if the citizens believe that libraries should focus on expanding digital services rather than physical library offers. Here, the citizens across a wide range are more positive, although at the same time they are a little divided on the question. For the male parent, the culture-consuming man and the super digital man, about half of the segment believes that the library should focus their efforts on digital rather than physical. The analog man, the analog woman, the culture-consuming woman and the female parent disagree with this.

At the same time, however, it is clear that very few believe that digital library offers can completely replace the physical one. An overwhelming majority therefore believes that the physical libraries must pass no matter what. This is shown in Figure 41.

Another issue that may be relevant to considering is whether citizens prefer to read physical books rather than digital e-books. Here there are a number of significant differences in the segments. Within all segments, a majority prefer to read the physical book. This applies, to a lesser extent, to the culture-consuming man, the super digital man and the male parent, where between 25% and 21% to a lesser degree or not at all, prefer to read physical books rather than digital. It is also a general finding in the survey that men have more digital preferences than women.

FIGURE 39: **To what extent do good digital library services reduce your need to use the physical library?**
Percentage that has responded to a large extent or to some extent.

Category	Percentage
The male parent	46%
The culture-consuming man	44%
The super digital man	40%
The super digital woman	38%
The female parent	34%
In total	32%
The culture-consuming woman	29%
The analog man	13%
The analog woman	11%
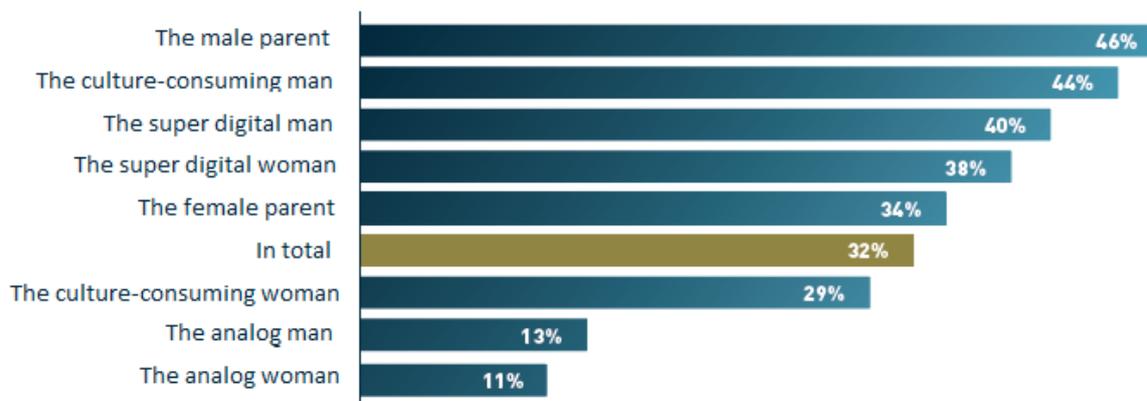
FIGURE 40: **To what extent do you think libraries should focus their efforts on expanding digital library offers over traditional library services?** Percentage that has responded to a large extent or to some extent.

Category	Percentage
The male parent	51%
The culture-consuming man	50%
The super digital man	48%
The super digital woman	43%
In total	37%
The female parent	35%
The culture-consuming woman	31%
The analog man	21%
The analog woman	10%
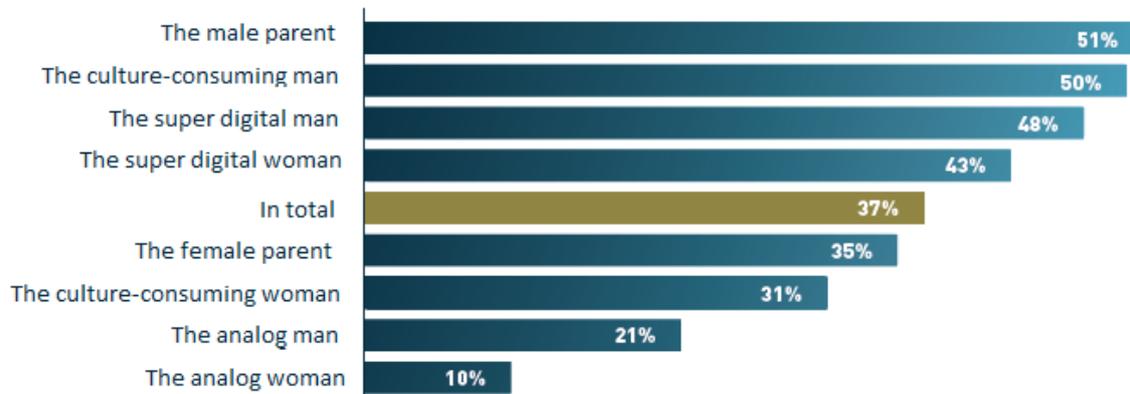
FIGURE 41: To what extent do you think the physical libraries must pass, no matter how much people switch to digital library usage? Percentage that has responded to a large extent or to some extent.

The analog woman	97%
The culture-consuming woman	95%
The female parent	94%
The culture-consuming man	93%
The super digital woman	91%
In total	90%
The analog man	86%
The male parent	86%
The super digital man	80%
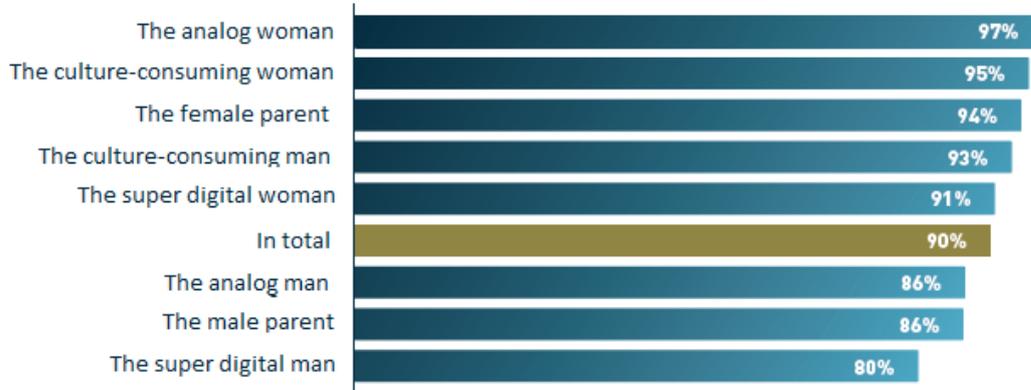
FIGURE 42: To what extent do you prefer to read physical books rather than digital?
Percentage that has responded to a large extent or to some extent.

|	
The analog woman	92%
The female parent	89%
The super digital woman	87%
The analog man	86%
The culture-consuming woman	85%
In total	84%
The male parent	79%
The super digital man	79%
The culture-consuming man	75%
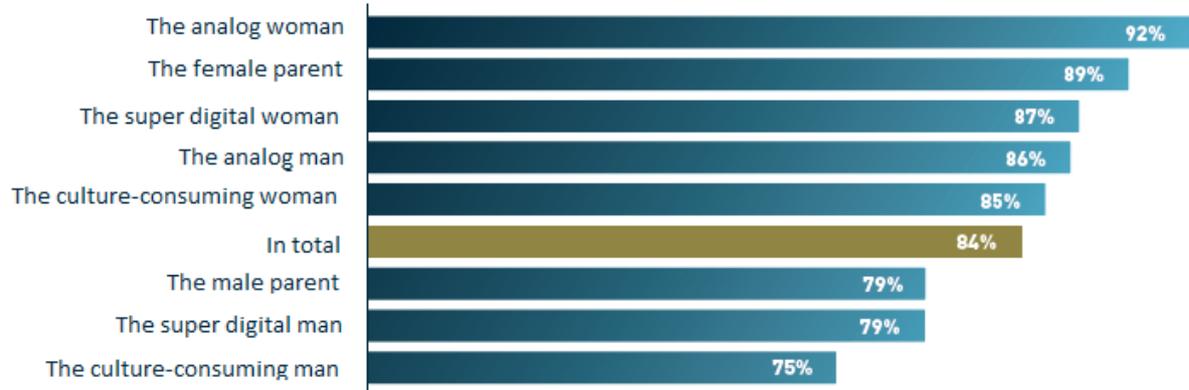
FIGURE 43: The segments' percentage of digital and physical library users now and their expectations in about three years.
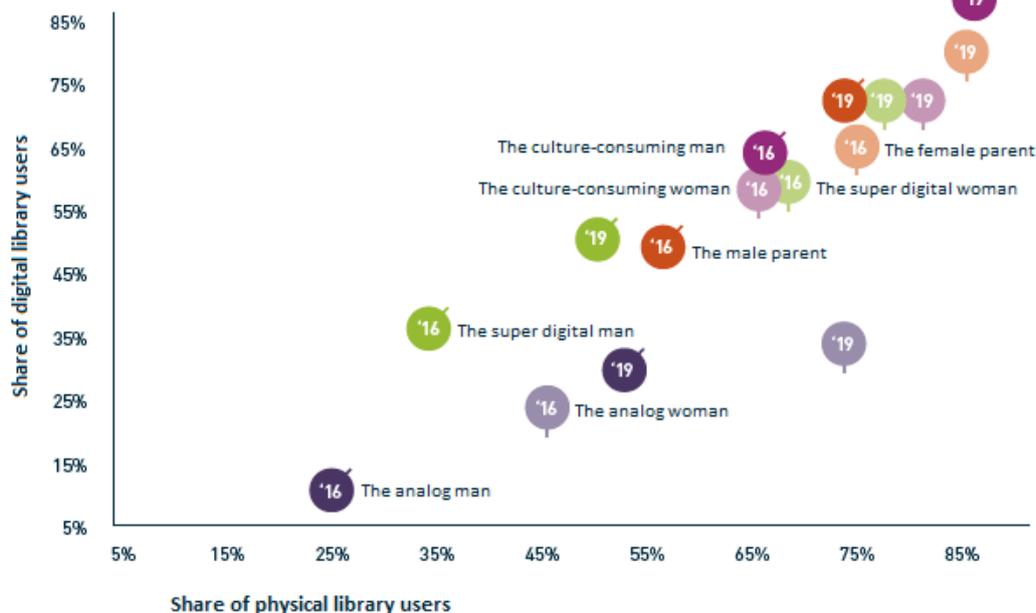
7.2. FUTURE LIBRARY USE

One last aspect that may be worth considering is the future digital library use of the segments. Figure 43 shows the segments' user shares as a percentage of the digital and physical library, as it is now, and as they expect it to be in three years, i.e. in 2019. It is thus the same figure as Figure 18, but with the addition of citizens' future expectations.

Generally, most people expect to have a higher future use of the digital library than their current use. This applies both to digital and physical. The culture-consuming man has the greatest expectations for future use. At the same time, it is the segment that has the highest share of current users. Among the analog segments, fewer have the expectation of being users in three years.

Of course, such a question is associated with great uncertainty as no one can answer exactly how their library usage is in three years. In view of this, however, there is a good reason for libraries to invest in digital library services, as many more citizens expect to use them more in the future than they do now. And it is important not only to get more users but also to get more frequent users. At the same time, of course, it is crucial not to forget the more analog segments that do not have the same expectation or desire to use the services more in the future.

LENNART BJÖRNEBORN LECTURER AT IVA, COPENHAGEN'S UNIVERSITY

What is the relationship between the physical and digital library? Does the digital library challenge the physical library's eligibility?

The physical library will not disappear. On the contrary, physical is an important prerequisite for the digital. You can also see it on the data in the report where it is mainly users who visit the physical library, who also uses the digital offers. It is a bit like Apple, still having their physical stores. It is a showroom that helps create relationships between users and offers. The physical library contains some important prerequisites, because it can also be the entrance to the digital universe. But, I really think it is misleading and unfortunate to make a distinction between the physical and the digital. We should think about how they complement each other.

How do you think they can complement each other?

What I am looking for at the libraries is that you think much more in one overall dissemination strategy for all platforms. That you see it as a whole. I have a model that I call the "resource triangle". One has the digital resources; One has the physical resources; And one has the human resources, both the employees, but the users as well. And what I focus on is the whole of the resources, where you can strategically work with communication paths between these resources, while looking at how the user in the center of the model can interact with these resources.

Not only can the physical and the digital point to each other's offers, these rooms also allow users and librarians to put their resources into play in completely new ways. If I as a user e.g. is making a search for heavy metal, it might be exciting if, in addition to search results from the database, I was linked to some "super users" who had some kind of expert knowledge in a given subgenre of the heavy. It will allow some user-to-user relationships that open up the library content in a completely new way. And it could just as well be the librarians you were linked to. One could even think of a whole database where librarians have indexed which fields they have knowledge of, which users can check out. In this way, one could imagine that a completely new desire would arise for users to address their library, because it suddenly becomes more clear where one can find useful knowledge. It will pave the way for relationships beyond local boundaries and libraries, and how to explore the huge volumes of physical, digital and human resources discovered by libraries, which each librarian on their own can't have an overview of.

What are the challenges in relation to the digital?

Let me first underline the strength of the physical libraries in this regard. It is largely the place where the unlooked-for can happen. If you have time in excess when you visit your local library, you tend to follow what you like more. Maybe I just came to pick up a reservation, but the front of a book that's about

brownies caught my attention, and I love brownies so I can't help to flick through it. Or maybe I'll talk to someone who is standing in the cartoon section. Although it may not be every time it happens, it is latent that I can join in some relationships other than just picking up my reservation. Opposite to the digital library, where we are often much more focused. People typically have limited time and attention when they move in the digital. We sort out fast-paced information, which we perceive as irrelevant. That way, it will feel extremely pushy if suddenly an advertisement for a brownie book pops up when I just have to go and borrow a book on the library's website. The weakness of the digital space can be said to be the fact that we often ignore information. You will find what you have planned and then it is over again. In fact, it's difficult to change the habit and do more than that.

If users are so reserved in the digital, how can digital help to add value to the library's total offer?

The power of the digital is that the speed is high. You can quickly find what you are looking for, and you can quickly jump between different resources. The question is then whether it is happening and actualized via the websites. I think it is about creating incentives for a culture where users can become more aware of offers that are not immediately visible to them and which can open the door for new possibilities. And here the library has many options, e.g. in terms of being able to search across different resources and arouse users' interests. But it could also be interesting if, as a user, you could highlight some values in the search field, so the searches do not get narrow and targeted, but also shows what could be surprisingly relevant – and it could also be via a user relationship – that is, so you may be recommended to follow a user who may open your eyes in a new way, e.g. something niche lyric. In this regard, I think it would be extremely exciting if I could give the libraries my consent for them to be watching what I and others with neighboring interests borrowed, and the libraries could hereby give me a message when they get something new within my field of interest. And they could also propose some things that I had not yet discovered that I might be interested in. That would change the way you could explore the huge volume of the diverse resources of the library. In this way, I think that a lot of users would really be interested in giving this consent for the use of big data. And it would also change how librarians could put their knowledge into play in relation to different types of users.

8. SUMMARY AND RECOMMENDATIONS TO WORK WITH THE SEGMENTS

Chapters 4-6 have highlighted a large number of differences in the segments usage patterns and attitudes and evaluations of the digital services. The following table summarizes these differences and allows you to get an overview of the most relevant differences. Next, a number of recommendations are given for working with the segments. This gives libraries a basis for organizing strategies for one targeted work with the segments.

FIGURE 44: Summary of the segments usage pattern.

Segments	Usability of the digital library offer	Primary use and knowledge of services	Where has the segment been inspired for use?
The male parent	Moderate frequent user	Entertainment and experiences. Know especially bibliotek.dk, Filmstriben and eReolen	Library website, friends and acquaintances and library staff
The female parent	Frequent user	Entertainment and experiences as well as knowledge and learning and child-related offers	Library website, friends and acquaintances and library staff
The analog man	Rare user	Knowledge and learning. Especially know bibliotek.dk	Library website and library staff
The analog woman	Rare user	Entertainment and experiences as well as knowledge and learning primarily through the physical library. Know especially bibliotek.dk, eReolen and Litteratursiden	Library website, friends and acquaintances and library staff
The culture-consuming man	Frequent user	Entertainment and experiences. Know especially bibliotek.dk, Filmstriben and eReolen	Library website, friends and acquaintances and library staff
The culture-consuming woman	Frequent user	Entertainment and experiences. Know especially bibliotek.dk, Filmstriben and eReolen	Library website, friends and acquaintances and library staff
The super digital man	Rare user	Entertainment and experiences as well as knowledge and learning. Know especially bibliotek.dk, Filmstriben and eReolen	Library website and library staff
The super digital woman	Frequent user	Entertainment and experiences as well as knowledge and learning. Know especially bibliotek.dk, Filmstriben and eReolen	Library website, friends and acquaintances and library staff

FIGURE 45: Summary of segments' wishes for digital services.
The column with the segments assessment of what is crucial to a good cultural service sums up their third and fourth most-respondent relationships, thus disregarding "User-Friendly" and "Good Overview of Service Content", which all segments have identified as the two most important factors.

Segments	Limitations of more use	Wanted content and what is essential for a cultural service (in addition to user-friendly operation and good overview)
The male parent	Lack of knowledge and visibility	Emphasizes broad content. Could wish for more offers regarding e-books and audiobooks
The female parent	Lack of knowledge and visibility as well as lack of overview and difficult navigation	Emphasizes broad content. Could wish for more offers for a personal library profile as well as e-books
The analog man	Lack of knowledge of offers	Emphasizes broad content. Could wish more help with Borger.dk, e-Boks and Digital Post
The analog woman	Lack of knowledge of offerings, lack of overview and difficult navigation	Emphasize the opportunity to get inspiration for new things. Want more help with Borger.dk and personal library profile
The culture-consuming man	Lack of knowledge and visibility as well as loan limitations	Emphasizes broad content. Could wish for more offers regarding e-books and audiobooks
The culture-consuming woman	Lack of knowledge and visibility as well as loan limitations	Emphasizes broad content as well as inspiration. Could wish for more offers regarding e-books and audiobooks
The super digital man	Lack of knowledge and visibility, content and topics are not interesting enough, as well as loan limitations	Emphasizes wide range. Wishing more e-books and online gaming, digital music services and digital communities
The super digital woman	Lack of knowledge and visibility as well as loan limitations, lack of overview and difficult navigation, as well as content and topics are not interesting enough	Could wish for more offers regarding e-books and audiobooks as well as personal library profiles

8.1 RECOMMENDATIONS FOR WORKING WITH THE SEGMENTS

The male parent:

- An effort focusing on the dissemination of available services
- In particular, dissemination of services with wide content in entertainment and experiences
- Develop "quick" offers that e.g. can be used during transport and from a smartphone
- Focus on services with child-related content

The female parent:

- An effort focusing on the knowledge of the services
- Focus on offers must be easy to navigate in and log in to, etc.
- Focus on child-related offers
- Focus on services with broad content of audio books and e-books

The analog man:

- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and not necessarily have any desire to start using them
- Focus on offers that contain knowledge and learning
- Inspiration through local newspapers and ads

The analog woman:

- Focus on offers that are easy to navigate
- An effort that emphasizes IT learning, e.g. in the form of IT courses and IT guidance
- Accept that the citizens in this segment have relatively little interest in the digital offers and not necessarily have any desire to start using them
- Inspiration through contact with library staff
- Offers that inspire to the use of material you would not have found yourself

The culture-consuming man:

- Focus on spreading the knowledge of several of the services
- Focus on the development of services with more material
- Focus on services with wide content in entertainment and experiences

The culture-consuming woman:

- Focus on services suitable for the tablet format
- A focus on services that inspire to new things you would not have found yourself
- Focus on spreading the general knowledge of the services
- Develop services with more material regarding audio books and e-books

The super digital man:

- Focus on the dissemination of knowledge about the library's digital services and their use
- Focus on services with knowledge and learning as purpose
- Focus on offers like online gaming and digital communities
- Targeted dissemination towards this group, whom is very critical of the library current dissemination of digital offers

The super digital woman:

- Focus on the dissemination of knowledge about the library's digital services and their use
- Is especially interested in services like bibliotek.dk and services with audio books and e-books, why there is good reason to communicate services aimed at these interests
- Focus on broad content services
- Development of services with more material
- Focus on services with knowledge and learning as purpose – services relevant in relation to study and work

8.2 NATIONAL AND LOCAL STRATEGIES

Based on expert interviews, the qualitative and quantitative study, The Danish Think Tank – Libraries of the Future, presents 4 national and 5 local strategies that will form the basis for possible considerations and actions in both local and national contexts.

1 **National Strategy 1:** Create knowledge of libraries digital offers. Make campaigns that can both relate on the national and local, such as posters and bookmarks distributed on the physical libraries. The low knowledge of libraries digital offers is the biggest challenge in terms of creating a useful usage in the digital.

2 **National Strategy 2:** Create a collected login for all the digital services. Too many users lose their patience with the services, or never reach the content of the services because it doesn't feel straightforward to use them. A low entry barrier must be ensured for as many as possible.

3 **National Strategy 3:** Enables a personal digital library profile. It could be through the opportunity to create your own library and put books on an online bookshelf as well as the possibility of the Comic Plus service. Give users a membership in the digital.

4 **National Strategy 4:** Enter in collaboration with other institutions so that libraries digital offers are available through other platforms. For example, DR, digital cultural archives, museums or schools' websites. It is relevant to be present in people's consciousness and digital daily life.

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1 **Local Strategy 1:** Create knowledge of libraries digital offers. Libraries are highly qualified to convey, but nevertheless inspire relatively little. Make the digital library a part of the cultural treasure that you are interested in showing the world.

2 **Local Strategy 2:** Enable local communities that are enhanced in the digital. Take advantage of making local activities into digital content that citizens can enjoy from your website and create, in parallel with the physical activities, digital spaces where users can and want to interact with each other.

3 **Local Strategy 3:** Work to involve citizens who live far away from the physical library. Create awareness and knowledge of the digital services of citizens who are not yet used to library users. There is a huge public service potential here.

4 **Local Strategy 4:** Communicate in the digital so it becomes relevant to the local community. There is a significant difference in what contexts apply in the digital. Are you interested in communicating a concrete agenda or looking for a conversation with the citizens? Try to understand the context.

5 **Local Strategy 5:** Stay updated in relation to what new digital offers DDB collects. If we do not even know the digital offers, then it is of course hard to inspire and spread their knowledge.

9. LIBRARY USE IN DIFFERENT MUNICIPALITIES

9.1. DIVISION OF LIBRARY RELATED MUNICIPALITIES

In order to obtain further knowledge about how the Danish people are using the digital library services, a division of municipalities has been made in some library-relevant municipality types. This gives more refined knowledge of the segments' use of the library in relation to the geographical position. The subdivision of municipal types has been made as a starting point

The division of Municipality types has its baseline in data from Statistics Denmark 2015. The factors taken into account are:

- Population in the municipality
- Population density in the municipality
- Education level in the municipality (measured as the percentage of higher education)
- Cost of library per resident in the municipality
- Library loans per resident in the municipality
- The percentage of active personal loans in the municipality, i.e. people who have borrowed books or used electronic resources within the last year, as an average of 2013-2015

FIGURE 46: Short outline on library-relevant municipality types.

A

The municipalities of this type are especially smaller rural municipalities. It is municipalities that are known to have low population and low population density.

In this type of municipality, the proportion of higher education is relatively low, between 15% and 29%. The cost of the library, as well as the number of active users and loans per citizen is also relatively low.

B

The municipalities of this type are mainly rural municipalities with several smaller city centers. They all have a relatively low population and a relatively low population density, which is still larger than most municipalities in municipality type A. These municipalities are high in terms of library activity: They have a medium-sized number of loans per capita and medium-sized number of active users.

For these municipalities, the proportion of higher education is slightly higher than the average.

C

Many of the municipalities in this municipality type are larger provinces, often with a large city in the municipality with an educational environment. They have a large population and medium-sized population density as well as a medium-level education level.

Library activity is relatively low, average of active borrowers is second fewest of all types of municipalities. However, average lending per capita is medium high.

D

This municipality type covers a number of municipalities in North and Central Zealand. These municipalities have a high or medium population density as well as medium and high level of education.

These municipalities have relatively high library usage with many active users and many loans as well as high public library costs per capita.

E

This municipality type denotes the largest cities in Denmark: Odense, Aarhus, Aalborg and Copenhagen (including Frederiksberg). These cities all have a very high population density, high population and high education levels. Loans per inhabitant and active borrowers vary from one municipality to another, but are generally low. The cost per capita is medium high.

Thus, the division consider a number of factors that have to do with the municipality's population composition and size, as well as a number of matters that specifically concern the use of library and the pattern in the municipality.

This has resulted in a division of five library-relevant municipality types, briefly outlined in the table below. Which municipalities fits in which municipality type, can be found in Appendix 1. Below are a number of key figures for the municipalities that explain the differences between them. Comprising is a review of the segment breakdown in each municipality type. The following figures show how the individual segment types are represented in the different municipal types. By comparing segment distributions in the municipalities with the general segment distribution at country level, as shown in section 3.2, it is possible to see how each municipality type differs from this.

FIGURE 47: Key figures for municipalities. (Note: Key figures are taken from Statistics Denmark and apply for the first quarter of 2015. Fanø is part of Esbjerg, since Fanø does not have any independent libraries. Proportion of higher education is a proportion of the population between the ages of 15 and 69. The proportion of active personal users are calculated as an average over the years 2013-2015 due to uncertainty about the figures).

AVERAGE POPULATION

Municipality type E	282,981
Municipality type C	79,647
National average	58,347
Municipality type D	41,877
Municipality type B	40,780
Municipality type A	33,691

POPULATION DENSITY

Municipality type E	705.4
Municipality type D	566.4
National average	131.9
Municipality type C	114.1
Municipality type B	74.4
Municipality type A	57.0

SHARE WITH A HIGHER EDUCATION

Municipality type E	38%
Municipality type D	30%
National average	29%
Municipality type C	24%
Municipality type B	22%
Municipality type A	20%

EXPENSES FOR THE LIBRARY PR. INHABITANT

Municipality type D	662
National average	488
Municipality type C	470
Municipality type B	464
Municipality type E	445
Municipality type A	381

LOANS PR. INHABITANT 2015

Municipality type D	7.56
Municipality type B	6.82
National average	6.26
Municipality type C	6.03
Municipality type E	5.69
Municipality type A	5.38

ACTIVE PERSONAL LOANERS 2013-15

Municipality type D	41%
Municipality type E	34%
National average	32%
Municipality type B	31%
Municipality type C	29%
Municipality type A	26%

9.2 MUNICIPALITY TYPE A

Municipalities in municipality type A have significant more citizens in the analog man segment. For the whole country, the share of this segment is 15%, while for municipality type A it is 20%. At the same time, the municipalities in this municipality type have a few fewer inhabitants in the segment of the super digital woman than the major urban municipalities in municipal types C and E and a little less of the super digital man than the others. However, they have significantly more of the segment of the culture-consuming woman.

The super digital woman 11%
The male parent 9%
The super digital man 8%
The female parent 12%
The culture-consuming woman 17%
The analog man 20%
The culture-consuming man 12%
The analog woman 11%
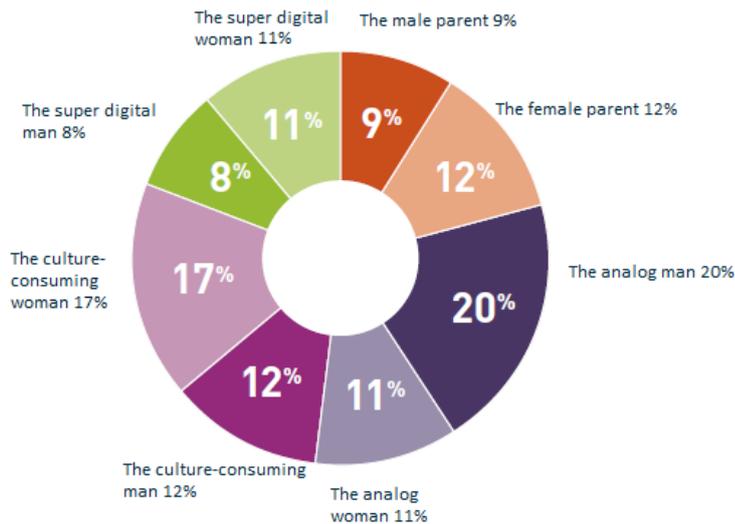
9.3 MUNICIPALITY TYPE B

The municipalities in municipality type B have the lowest proportion of the segments the super digital man and woman. For the whole country, the proportion of the super digital woman is 16%, whereas in municipality type B it is 8%. Likewise, they also have a smaller proportion of the super digital man than the whole country. At the same time, in this municipality type, there are significantly more of the segments the analog man and woman.

The super digital woman 8%
The male parent 10%
The super digital man 8%
The female parent 10%
The culture-consuming woman 17%
The analog man 19%
The culture-consuming man 12%
The analog woman 16%
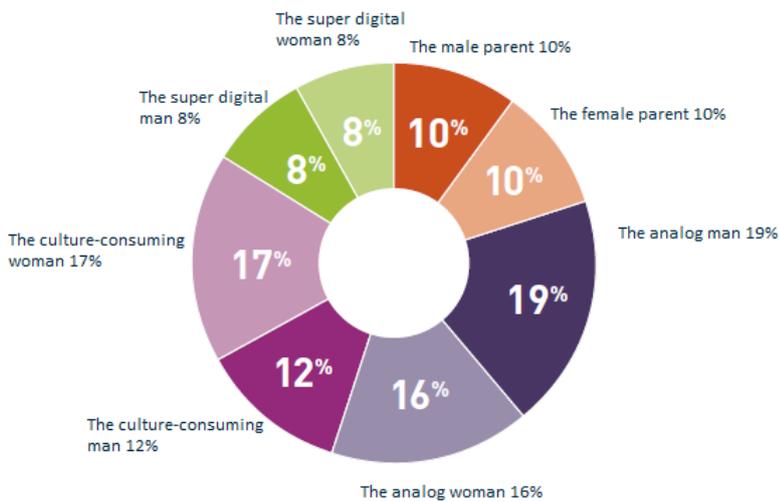
9.4 MUNICIPALITY TYPE C

For the larger cities, the variation is not so big. However, the proportion of super digital men is three percentages lower than the general distribution. In addition, the segments are distributed as corresponding to the general image with a maximum of two percentage points variation.
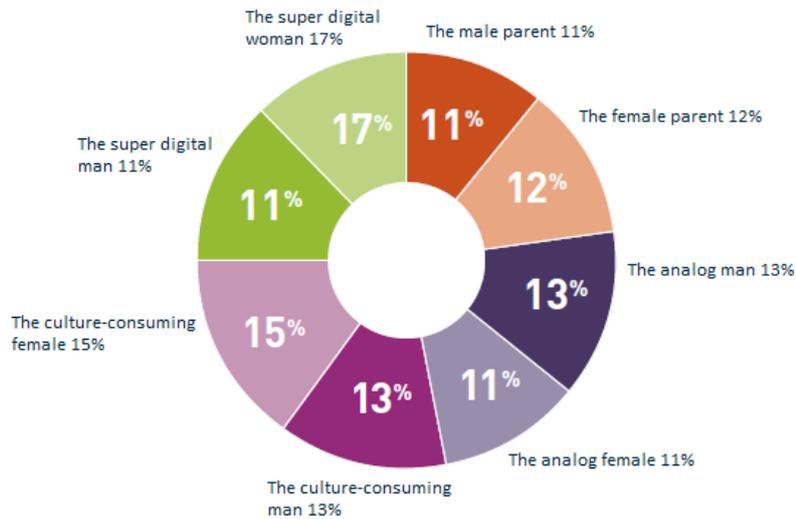

9.5 MUNICIPALITY TYPE D

For the north and central municipalities of Zealand there is a very small degree of variation from the general picture. The only remarkable difference is the proportion of super digital women, which is lower than for the whole country. For the whole country this segment is 16%, while for municipality type D it is 12%. At the same time, these municipalities have three percentages more of the segment the culture-consuming man and a little less of the segment the analog man.
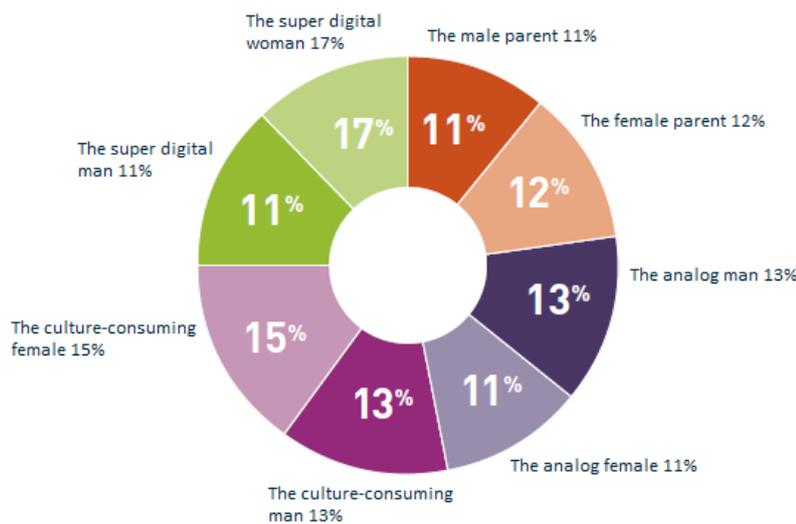
9.6. MUNICIPALITY TYPE E

For the university cities, the variation is large. The proportion of the super digital man and woman here is significantly larger than in the other municipalities, which together account for 47% of the population in the municipalities E. The proportion of parents is also slightly lower than in the other. The proportion of the analog man and woman is also slightly below the total distribution for the whole country. Likewise, the proportion of the culture-consuming man is also slightly below the national distribution.

The male parent 8%

The super digital woman 26%

The female parent 8%

26%

8%

8%

The analog man 9%

9%

6%

The analog woman 6%

21%

8%

The super digital man 21%

13%

The culture-consuming woman 8%

The culture-consuming man 13%
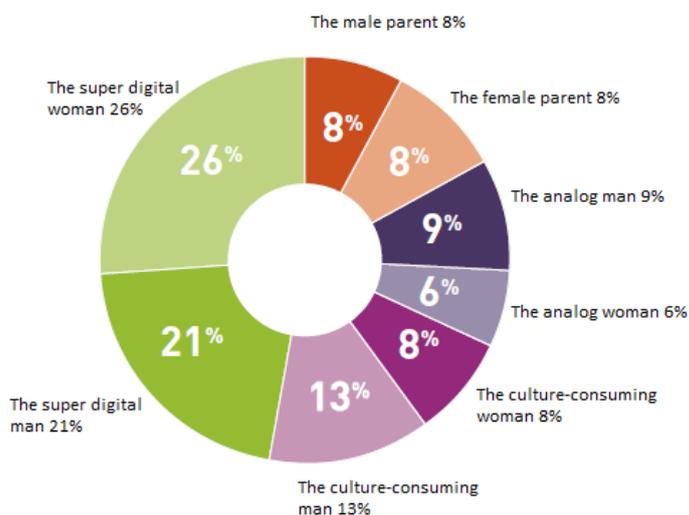
9.7. STRATEGIC CARDS TO THE COMMUNITIES BASED ON THE COMMUNITY TYPES

Based on the segment composition in the municipalities, you can set up a strategy chart as below, which enables you to work to increase your user share. In short, the card should be read as a cross between the segment size on one side and the segment's share of the digital library on the other hand. Below is a strategy map for municipality type A as an example: The segments that are placed in the dark-orange "action area" are those that the municipalities can work with to increase their user share. These are the segments that both have a large share of citizens in the relevant Municipality type, and at the same time have a low user share. The segments who take up less space in the municipality or have a relatively low user share are placed in a brighter area, as it is less beneficial to work with them. The segments, who takes up relatively little space and at the same time already having a high user share in the municipality type, is least advisable for the municipality to work with. The strategy card must thus be understood in close relation to the recommendations for working with the individual segments in section 8, which provides suggestions on how to target work to the different target groups.

In municipality type A, the segment is the analog man who has a low user share and who simultaneously occupies 20% of the municipality's population. Thus, this is an obvious segment for working with in trying to get them to use the library more. At the same time, however, it is also the segment that has a low inclination to use the digital, so it might also be obvious for libraries to work with the analog women and culture-consuming women segments. In section 8 above, you can read recommendations to work with these three segments.

**FIGURE 48: Strategic map for municipality type A.**

Strategic cards should be understood as an input to the development of how to work with the segments. It shows which segments are large and which at the same time have a low user share, and as such will benefit most to increase this user share. Thus, the strategy card can be an obvious place to begin in the development of a concrete strategy for the work on digital library services, but it is also important to emphasize that there are other considerations that, in addition to the other sections of the report, can be chosen to focus on.

In the above case, it is especially the segment of the analog man that it may be obvious to work with. There may, however, be good reasons for working with segments that are not in the "field of action". Segments with a low user share, but at the same time relatively small, also require attention. Even those segments that are in the white area of the insert card, which are relatively small and have a high user share, may also make sense to work with to increase the user share in the municipality. Below is shown and explained strategic cards for other municipalities:

In municipal type B, the segments of the analog man and woman has the lowest user shares and make up the largest share of the population. The super digital man and the culture-consuming woman are also obvious segments to work with. Thus, in continuation of Section 8, it could be relevant to work with IT courses and IT-learning for the analog segments, as well as focus on easy-to-navigate and easy-to-understand services, while working with the culture-consuming woman it may be relevant to focus on services that inspire new material. However, this is just a small selection of the recommendations for work with the segments, which can be read in section 8.

**FIGURE 49: Strategic map for municipality type B.**

In municipality type C, it is especially the analog man who is obvious to work with, since the segment is large and the user share is very low. The super digital woman and the culture-consuming woman are also large segments that already have a large user share, but it nevertheless could be important to work further with them. Here, like in municipal types A and B, it could be relevant to work with IT courses and IT learning to support the analog man. Recommendations for working with other segments can be found in section 8.

FIGURE 50: Strategic map for municipality type C.

In municipality type D, it is especially the super digital man and the analog man who occupies a lot of the population of the municipality but who has a low use of the digital library offering. The culture-consuming woman is the largest segment of the municipality type, and there for it can be beneficial to work with her, even though she already has a high proportion of library users. For example, working with the culture-consuming woman could focus on services that greatly inspire the use of new materials. However, you can read more in section 8 about recommendations for working with the segments.

FIGURE 51: Strategic map for municipality type D.
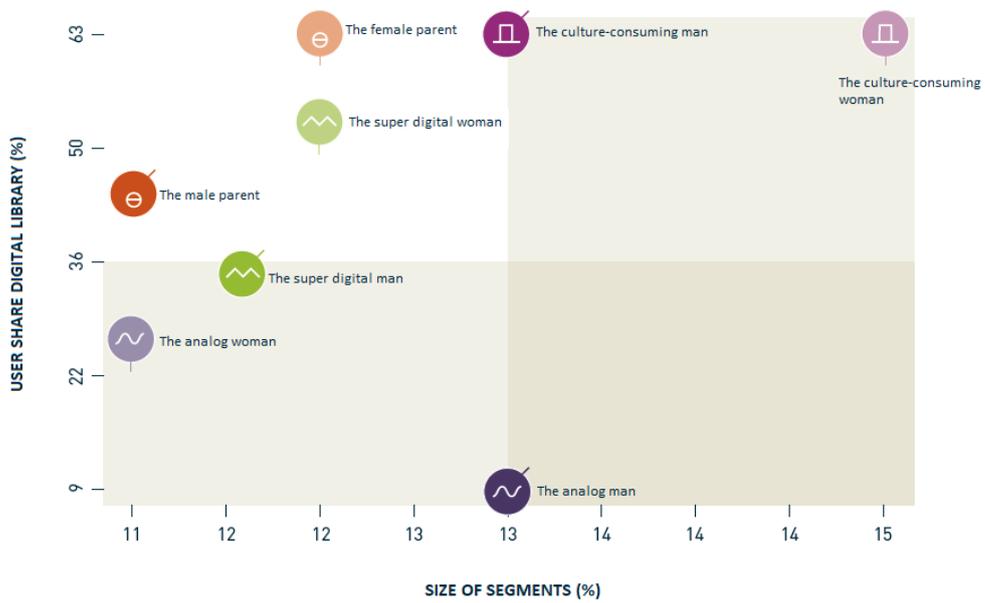
Municipality type E, is characterized by the fact that it is only in very small segments that have a low library usage. Here it will be a consideration whether you want to work with the large segments like the super digital man and woman, even though they already have a relatively high library usage, or whether you want to work with the slightly smaller segments, the analog man and woman.

ANNEX 1: DIVISION INTO IN MUNICIPALITY TYPES

Below is a division of the country's library services in 5 different municipal types. The municipalities are a solution to the dilemma that we would like to analyze citizens faire close and locally for the individual libraries, but at the same time there are no resources for or opportunity to carry out 98 specific municipal analyzes. Municipalities must thus be used to offer the individual libraries a municipality type which makes sense to reflect on and become more intelligent of its citizens, in relation to citizens' composition, digital habits and inclinations as well as demand for digital services. All in order for the individual municipality to work on a knowledge-based local digital library strategies. The municipality division has become purely methodological based on a statistical cluster analysis. The method divides the municipalities into a number of groups based on the following segmentation variables:

1. Population
2. Population density in the municipalities
3. The level of education (measured as the proportion of higher education in the municipality)
4. Current net expenditure per capita to the library
5. Library loans per capita as well
6. The proportion of active personal users in relation to the population in the municipality

The division is then adjusted based on practical knowledge of the municipalities.

FIGURE 53: Municipality types and selected municipalities.

Municipality type A	Municipality type B	Municipality type C	Municipality type D	Municipality type E
Assens	Billund	Esbjerg (incl. Fanø)	Dragør	Odense
Faxe	Bornholm	Fredericia	Fredensborg	Aalborg
Haderslev	Brønderslev	Frederikshavn	Gladsaxe	Aarhus
Hedensted	Egedal	Holbæk	Glostrup	Frederiksberg
Ikast-Brande	Favrskov	Horsens	Gribskov	København
Jammerbugt	Frederikssund	Kalundborg	Halsnæs	
Kerteminde	Faaborg-Midtfyn	Kolding	Herlev	
Langeland	Guldborgsund	Næstved	Hillerød	
Lejre	Hjørring	Randers	Hvidovre	
Lolland	Holstebro	Slagelse	Ishøj	
Morsø	Lemvig	Herning	Rødovre	
Norddjurs	Mariagerfjord	Viborg	Brøndby	
Nordfyns	Middelfart	Vejle	Albertslund	
Rebild	Nyborg	Silkeborg	Ballerup	
Ringkøbing-Skjern	Odder	Skanderborg	Helsingør	
Ringsted	Odsherred	Svendborg	Vallensbæk	
Skive	Struer	Sønderborg	Roskilde	
Sorø	Varde		Tårnby	
Stevns	Vordingborg		Høje-Taastrup	
Syddjurs			Køge	
Thisted			Greve	
Tønder			Allerød	
Samsø			Furesø	
Læsø			Gentofte	
Ærø			Hørsholm	
Vejen			Lyngby-Taarbæk	
Vesthimmerlands			Rudersdal	
Aabenraa			Solrød	

ANNEX 2: METHOD

DATA COLLECTION

Data collection took place during the period end of May to mid July 2016. A total of 7,224 complete questionnaire replies have been received.

There have been two types of data collection for the study. Firstly, a national population survey was conducted among 2,053 representative selected Danes aged 15 or more. The collection is made via Moos-Bjerre and Langes web panel. In order to increase the data base, there is, secondly, supplemented by a collection of users of 7 municipal libraries: Hedensted Libraries, Syddjurs Library, Køge Libraries, Viborg Libraries, Nyborg Library, Frederiksberg Library and Esbjerg Municipality Libraries. The users of these libraries have been contacted via email. A total of 5,171 library users have been contacted via this channel.

This supplementary collection, of course, provides a number of imbalances, partly in relation to an overrepresentation of library users in relation to the Danish population and partly by the representation of the 7 municipalities. Both parts have been taken into account through a comprehensive weighing of data as described in the next section. In short, user responses have been technically weighted down, so their responses only affect the overall result, corresponding to the average usage intensity and type of municipality.

Collection of responses have been done as electronic reply via direct email invitation with unique link to online questionnaire. This method of collection has been used because it increases the quality and representativeness of the study that direct contact has been reached with a large number of randomly selected citizens and because it has allowed the process of reentry among those who have not responded initially. Since many Danes use e-mail services, e-mail information is available on a wide range of Danes. Via the link in mail text, citizens have accessed the electronic questionnaire via unique access per. citizen.

REPRESENTATIVITY AND WEIGHT

The 7,224 complete questionnaire replies have provided a solid data base, a significant representativeness overall and comprehensive options for breaking down data in segments and at municipality type level.

To compensate for imbalances in representativeness, the dataset is weighted in terms of gender, age, education level, municipality type and user share. This means that the data set is weighted so that it is fairly appropriate for register data for Denmark's inhabitants with regard to the distribution of men and women, the distribution of age groups, distribution of education categories, population numbers and the user share in the library. Specifically, an iterative strategy has been chosen, where the weights go together until one finds a distribution that is satisfactory in relation to the population composition.

In order for the weighing to not lead to excessive weights, a strategy has been chosen where the data is "weighing less". That is, the data set after weighing has ended on an effective number of responses of 6,551.

STATISTICAL SIGNIFICANCE AND SAMPLE UNCERTAINTY

The survey includes a large number of Danes. Nevertheless, it is just a sample or a random test of the population of all Danes. Therefore, the findings are always associated with some degree of uncertainty. Statistical analysis of the results has been performed. Including, in particular, the differences between the different dimensions and between different user groups. As a general rule, only the results are displayed and commented – i.e. where the difference is of a certain size – and statistically significant at a 95% significance level – i.e. that it can be excluded that the difference found is merely a coincidence. A statistically significant result means that the results of this sample are sufficiently safe to be generalized to be representative of all Danes. This slightly restrictive or cautious approach is established to ensure that only significant and tangible results are traded.

HANDLING OF "DO NOT KNOW" ANSWERS

In many of the questions shown, respondents in the survey also had the opportunity to answer "do not know". It is necessary to include these responses as respondents who do not know of a particular relationship or for other reasons feel unable to answer a specific question should not be forced to express an opinion. If respondents are forced to decide on questions that they really do not feel they know something about, they risk being arbitrarily responding, which destroys the validity of the investigation. Unless a respondent has answered "do not know" to all or most of the questions, it is of course also desired that the respondent's reply be included in the cover and the statement of the other questions in the survey. The problem is solved in most places to ignore the non-responses as well as in some analyzes to insert the average value on each question in the few cases where the answer is "do not know". This ensures that the effect of "not know" answers becomes neutral.

SEGMENTATION ANALYSIS

For the purpose of developing a good segmentation we apply a statistical cluster analysis. There are a number of statistical tools for performing cluster analyzes.

In this analysis, a technique called a two-step segmentation – "TwoStep Clustering" – is particularly useful for cluster analysis of a relatively large number of materials. One of the key features of the "TwoStep" procedure is that it can decide how many clusters are to be found on the basis of a given number of materials.

In this connection, the results simultaneously indicate how strong the statistical evidence for these clusters is. It is thus possible to reject cluster analyzes whose results do not have sufficient statistical security or do not live up to the more practice-oriented evaluations.

It is not trivial how to segment and what quality a given segmentation model has.

Basically, one can say that a good segmentation model is:

- Identifiable: One must be able to determine which segment a person belongs to
- Essential: There must be significant benefits for the use of user sharing
- Available: segments must be accessible by easy selective distribution, communication, etc.
- Stable: The segments must maintain a certain consistency in attitudes, preferences, behaviors, etc. over time

- Differentiated response: The segments must respond as a group differently to efforts
- Action-oriented: it must be possible to "read" and "understand" the segments and translate into targets for practical offer development, guidance and communication

With this technique, 8 segments have been identified. The model has a fine statistical fit and at the same time satisfies the more practical and application-oriented considerations. The segments are named after the most typical features within each group.

It is noted that a segment consists of persons with a number of uniform characteristics and at the same time differ significantly from other segments of people who have other common features.

FIGURE 54: Segment variable.

FOCUS	EXPLANATION
Gender	Citizen's gender • Male • Female
Age	Citizen's age measured in the intervals: • 15-19 years • 20-29 years • 30-39 years • 40-49 years • 50-59 years • 60-69 years • 70 years or more
Children	Whether the citizen has children under 15 years
Education	Citizen's highest education level measured in the number of years to which the education level is standardized. For example, if the citizen has specified primary school as the highest achievement, counts this as 9 years.
Index: General relation to it physical library	Citizen's use of the physical library and attitude towards library services. Relationship is measured as an index that summarizes relation to the library in childhood, that current use and self-assessed future use as well as the citizen's opinion as to whether libraries contribute to more communities, more knowledge and learning as well as experiences and entertainment. The index is scaled from 0 to 10. 0 denotes a person who never uses the physical library and do not believe this has any value in terms of the mentioned parameters. 10 denotes a person who uses the library weekly and largely believes that the library has value.
Index: Using the Digital Library	The citizen's current digital usage pattern and attitude to whether digital library services replace or simply complement current physical services.

	The index is scaled from 0 to 10. 0 denotes a person who never uses the digital library and to a very low extent believe that it can replace the physical library.
Index: E-readiness	Expresses how safe and experienced the citizen is in the use of the Internet. E-readiness is measured as an index that looks both at a practical application of IT equipment and an overall security feeling in the use of internet services and whether online communication feels personal. Furthermore, the citizens' assessment of whether the increasing digitization is considered a positive or negative development is also included. The index is scaled from 0 to 10.
Index: Technology	Expresses the extent to which the citizen has access to the internet at home and at work. This is measured as an index of the degree of mobility using internet services and the type or types of devices the citizen uses (e.g. tablet). The index is scaled from 0 to 10.
Index: Digital behavior	Expresses the citizen's digital behavioral pattern, both for leisure and for work use. It is measured as an index that summarizes the amount of time, the citizen daily uses online as well as the citizen's use of online community creators such as discussion forums and social activity as well as even general use of news sources, social media and cultural services. The index is scaled from 0 to 10.

Within each segment, there exists a center that represents the average of the associated persons values on the different variables. Thus, in the cluster there are also variations in the characteristics of the persons. Within the same cluster, there may be people who differ from each other on some points, but the people have more in common with the center in this cluster than with the center in the other clusters.

DIFFERENCE FOR SEGMENT MODEL USED IN REPORT FROM 2014

For the purpose of developing a segmentation we apply a statistical cluster analysis. The segment model that has been found most relevant and useful in relation to working with local digital library strategies consists of 8 segments.

The segmentation model differs from previously used, and result of this are among others, that the found 8 segments are different from the 10 segments identified in the study "Libraries of the future – a segment analysis" from 2014. The purpose of that study was to broaden the qualification and targeting of library

work across physical as well as digital platforms. The current study has much more focused and limited aim at qualifying the libraries' work with the digital services as well as organizing, meeting and communicating digital services and offers to the citizens. Therefore, some other segmentation variables have been used and it shows a much more nuanced view on the citizens' digital preferences for cultural services, their digital habits and everyday use in a wider sense.

Likewise, with the segmentation in 2014, there was a wish for a focus on the young people. Therefore, a segmentation analysis was organized, where we first isolated the young target group and ran a separate segmentation on this part of the data. This showed a result of other segments than would have been the case with a total segmentation of the entire material at the same time.

In addition, there are 3 years between the two data sets. 3 years on the one hand is not much but at the same time it is of great importance in a digital context both in terms of citizens' habits and digital offers. One example is the growing tendency to stream movies via e.g. Netflix, which has just intensified over recent years. About which one cannot speak of direct causality, such habits will probably also affect citizens' use of a service like Filmstriben. Similarly, e-book loans has steadily increased over the last 3 years, which also reflects changes in citizens' digital habits. These factors will of course be of importance to the present segmentation and potential differences to the segmentations from 2014.

In other words, there is no direct translation between the two segmentation models, in the way that, for example, can say that the segment that in the first survey was called "the young worker" in the new survey corresponds to a particular segment simply by another name. The "Young Workers" segment of the 2014 report is divided into several segments of the new model, and is found in the segments of "the male parent" and "the super digital man". Another example is that the "2014 cultural report" is also divided into several other segments, most of which are found in the slightly larger and wider segment of the culture-consuming woman. However, some are also found in the "culture-consuming man".

In other words, we can only try to compare some of the segments' interrelationships between the 2014 report and the present report. Below, it is based on the respective 2014 segments tried to describe where they belong in the 2017 report segments.

Young parents:

They are diligent users of digital media, but it is only to a limited extent that they use the digital offer of the library, such as eReolen (only 2%). They mostly correspond to the "parents" group in relation to the use of the physical library, but their frequency of use of the digital offers is smaller.

Parents over 30 years:

Corresponds mainly to the "parents" group. However, they mostly relate to "the male parent" according to their physical and digital usage rates, which is lower than "the female parents".

Young people taking a higher education:

Matches the "super digital" both through digital competencies and their use of the library's digital services. Their usage frequency of both the physical and digital library reflects more "the super digital woman" than the male pendant.

Young people under secondary education:

Corresponds to "the super digital", but again with the greatest similarity to "the super digital woman". The group consists primarily of girls (74%) and is competent in the digital and uses the digital libraries a lot. Has higher usage frequency than "the super digital woman".

The nerd:

Corresponds to the "super digital man". He is at home in the digital, but doesn't use the libraries digital offers a lot. Likewise, the usefulness of the physical library is limited. The nerd is not so socially interested, where "the super digital man" on the contrary often contacts people via the digital, but the discrepancy can also be that the nerd has not been asked if he uses the social in the digital.

The cultural superuser:

Corresponds to the "culture-consuming" group, but with emphasis on "the culture-consuming woman", as it reflects the gender distribution as well as the usage frequency of both the physical and digital library.

The young worker:

Equals mainly "the super digital man" and "the male parent", but despite the frequent use of modern media, he has relatively little digital skills. Likewise, his usage rate is relatively low, which best reflects the "the analog woman" usage.

Individualist:

Corresponds to the analog group through relatively low usage rates and limited digital skills and orientation. But also reflects the "super digital man" through age and higher use than the average of knowledge-related offers.

The senior:

Corresponds to the "analog" group with a valorization to the "analog man" tendencies. Very limited usage frequency of both the physical and digital library.

Middle-aged from lower middle class:

Corresponds to the "analog" group. Focus on the physical books. Has an extremely limited use of the physical library and further limited use of the digital library's offers.