Schäfer, Katharina; Rasche, Peter Wilhelm Victor; Theis, Sabine Wilrun; Bröhl, Christina; Olga, Apdarmani; Seinsch, Tobias; Barton, Laura; Wille, Matthias; Brandl, Christopher; Nitsch, Verena; Mertens, Alexander Wilhelm: Survey-Based Personas for a Target-Group-Specific Consideration of Elderly End Users of Information and Communication Systems in the German Health-Care Sector, doi: 10.18154/RWTH-2019-03562

Karin, born 1943 (74 years old)
Retired for nearly ten years, alteration tailor

**Personal background**
- Worked in a tailor's shop until he retired.
- Was a housewife for several years from the birth of her children to their entry into school age
- After the children moved out, they adopted another foster child.
- She lives with her husband in her own house in the suburbs.
- Their children live nearby and visit them regularly together with their grandchildren

**Health situation**
- Suffers from arthrosis and hyperthyroidism and the associated high blood pressure
- Pay more attention to their diet and the intake of their medicines
- She feels the pain due to her osteoarthritis as a burden

**Health-related information**
- It is neutral with regard to health-related information.
- Interested only in a few questions specific to her
- Would rather talk to her doctor about health-related topics, as she finds it difficult which media are credible
- Likes to be advised by family and friends and easily accepts advice from them
- For example, in the case of side effects of medication, she tries to determine the reasons herself before going to the doctor

**Attitude to technical devices**
- She’s not particularly curious about technical development
- Has an old desktop PC with which she sometimes types letters, writes mails or looks up timetable information
- Uses traditional media, such as paper calendars
- She does not believe in new technology (e.g. smartphones) and new communication services and is quickly overwhelmed by a lack of experience
- For emergencies, she has a rudimentary mobile phone with a relatively large keypad at the insistence of her family
- According to her view, the interpersonal is lost if only technology is used for communication
- Touch technology and apps and their operation cause her a lot of problems, but this doesn't bother her
- In Karin's opinion, their fellow men are technology addicted
Monika, born 1952 (65 years old)

In transition to retirement, musicologist

**Personal background**
- Works in a church and teaches at a university
- Lives alone in a large rental apartment in a big city
- Her husband died a few years ago and they had no children
- She has a large circle of friends and her sister and her children visit her frequently

**Health situation**
- Monika is doing well healthwise, apart from slight overweight and sometimes back pain, which she does not find tragic
- Try to counteract the symptoms with plenty of exercise and gymnastics
- She pays more attention to a healthy lifestyle overall

**Health-related information**
- Monika actively searches for relevant health-related topics and is very interested in the following themes
- She does not have any problems in searching for health-related topics
- It finds it difficult to assess information from the public media (in particular the Internet) and to weigh up whether it is credible and is critical of it
- She prefers to rely on statements from her doctor or her friends and family
- She is satisfied with the sources and information at her disposal

**Attitude to technical devices**
- She owns various technical devices (e.g. e-book reader), which she received as a gift
- She rarely uses the equipment and her husband owns most of it
- She prefers working with her laptop for work, writing mails, watching videos and doing banking
- Health-apps she finds terrible and is afraid of misdiagnoses of these
- She has no great interest in new technology, because technical innovations make it difficult for her to understand them (e.g. touch technologies)
Renate, born 1948 (69 years old)  
Retired for six years, administrative employee

Personal background • Renate worked in her career until the birth of her children and devoted herself to the education of these children  
• Only when the children came to secondary school she worked half a day again until she went into early retirement  
• She and her husband have their own house in the city  
• The children are often there to visit and help with everyday tasks

Health situation • She has Parkinson's disease, which she has well under control through therapy and medication  
• This disease is not yet far advanced, but it needs support in everyday life  
• She also has slightly elevated blood pressure, which she finds unproblematic

Health-related information • She is very interested in health-related information (e.g. information on harmful behaviour) and finds it easy to find it  
• It takes a critical view of information from the public legal media  
• Renate shares her knowledge with her family and doctors in order to gain confidence (e.g. new treatment approaches)

Attitude to technical devices • She is very interested in technical devices and owns a desktop PC, e-book reader and tablet, which she often uses  
• She got an outdated smartphone from her daughter, which she uses less often  
• She likes to use the tablet to gather information, read private messages and watch videos  
• For desktop PC installations it needs help, but for other media it is independent  
• Her illness sometimes makes it difficult for her to handle her equipment  
• Private things from her life she does not like to share, because otherwise there would be too much time in her life  
• Renate owns several apps and handles them well on her devices and arranges them in a meaningful structure  
• She is happy to inform herself about new apps or new technical developments and can quickly learn how to use them  
• She finds health tips (e.g. first aid apps) useful because they support everyday life, but she is afraid of technical failure and her own dependence on them
Angelika, born 1951 (66 years old)
Retired for one year, management consultant

Personal background
- Angelika studied business administration and worked in this area, continued only a short time after birth
- She and her boyfriend have their own house in town
- Her son lives nearby, so Angelika often looks after her grandchildren
- She has a good relationship with her ex-husband

Health situation
- Angelica has a slightly elevated blood pressure and often problems with the stomach
- She has to pay more attention to her diet and has already undergone surgery on her stomach
- She finds it incriminating that she is not allowed to consume certain foods

Health-related information
- Health-related questions interest them only mediocly and inform themselves only casually
- She sometimes finds it difficult to understand medical instructions and bills of treatments
- Information from the media is critical, as she sees in it only an entertainment value and no information value
- It is important for her to be able to discuss information with her relatives and doctor
- The subjective support of the family plays a major role for them in health-related issues

Attitude to technical devices
- She has a laptop and a tablet which she can use for everyday work, reading mails, looking for information, banking etc.
- She also has a rather new smartphone, which she often uses to communicate with others (e.g. send voice messages), visit social networks and use the note or calendar function
- Your grandchildren install their new apps and also learn about new media trends through these
- She finds particularly exciting health or assessment apps and uses them daily
- She sometimes even looks on the Internet for new apps for it
- Overall, it has no problems with technical equipment, but is reluctant to rely on its
Michael, born in 1953 (64 years old)

One more year until retirement, motor mechanic and car developer

- Michaels qualified as a car mechanic and after a few years studied mechanical engineering
- He and his wife have two grown children and live in a small house in the city
- His grandchildren are still very young (are still in primary school and kindergarten)
- He is overweight, has high blood pressure and type II diabetes
- Due to his health burden he has to pay more attention to his lifestyle
- With an appropriate measuring device, he measures his blood sugar level every day, but that does not cause him any problems
- Due to his lack of exercise, he also suffers from back pain

- When making decisions about health-related issues, the opinion of his doctor and his family is important to him, as such decisions are difficult for him
- For further information, he uses his tablet, but is overwhelmed by the possibilities of the dimensions
- He considers information in magazines and on television to be untrustworthy
- He informs himself independently about newly published health apps (e.g. various fitness apps)

- Michael has bought himself an E-Book-Reader and finds it practically has so many books at hand
- He received a tablet as a gift from his children which he uses daily for reading mails, shopping online and listening to music
- He owns an older smartphone from his son he can operate well and installs even apps and updates
- Using his technical equipment, he also does banking, books tickets and organizes his appointments
- But with unknown functions, he involves his son to help
- Michael relatively curious about new technical developments, but needs some support at the beginning
- He likes to exchange ideas about new technology with his social environment and researches about it on the Internet
| Personal background | Hans completed his training as a materials tester and worked in various companies until his retirement  
|                     | He has been retired for 1 ½ years and enjoys this, for example, in the form of travelling with his partner  
|                     | Hans and his partner live in a house in the suburbs and are frequently visited by their children and grandchildren, who are still very young |
| Health situation    | Hans is suffering from overweight and arthrosis, which affects him more and more in his everyday life  
|                     | Sports activities are supposed to help, but he ignores them  
|                     | He suffered from cataracts, but this rarely causes him problems because he underwent surgery |
| Health-related information | Hans only deals with the topic of health when needed, but has no problem understanding it  
|                         | He trusts digital and public media less and prefers his doctor as a source of information  
|                         | He is personally interested in the current topic of the nutrition debate, but is divided as to whether he should believe everything |
| Attitude to technical devices | Hans regularly uses his laptop to write mails, work with text processing programs and other tasks  
|                                   | Through his children he got to know smartphones and bought himself one 6 years ago  
|                                   | He enjoys being online anywhere, uses many applications (e.g. calendars and notepads) and likes to send voice messages to save himself the hassle of typing  
|                                   | Other activities, such as booking trips, obtaining timetable information, for example, can also be arranged independently and only require help sometimes, e.g. with installations.  
|                                   | Hans is very open-minded about technical development and is very capable of learning  
|                                   | He likes to use applications, but quickly loses interest, that's why he informs himself about news in this regard through his social environment and online platforms  
|                                   | He does not find health apps so exciting, except for exceptions such as the offers available from the health insurance companies and does not worry about their data protection |
Klaus, born 1944 (73 years old)
Retired six years ago, teacher and specialized employer for administration

**Personal background**
- Klaus studied teaching, then changed profession and became an administrative assistant in spite of retirement age he worked two years longer
- He lives with his wife in a house in the city and often for professional reasons a grandson lives in the guest room
- They have three children who live with their families distributed in Germany

**Health situation**
- Klaus suffers from high blood pressure and rheumatism and treats the frequently occurring pain with medication
- He finds it difficult to understand the medication and its interactions and has them explained directly by his doctor

**Health-related information**
- Klaus is not interested in health-related topics and does not like to talk about them with his social environment, instead he only talks about them with his doctor
- If he rarely informs himself about health-related topics, it is not difficult for him to inform himself about books and the digital world
- He is critical of information provided by other media such as television and magazines
- He visits preventive medical checkups consistently, as he considers it more sensible than to deal with potential illnesses

**Attitude to technical devices**
- Since his retirement, Klaus has been using a Desktop PC to write e-mails, conduct banking transactions and do online research.
- Sometimes his grandchildren help him with problems or installations
- He bought a smartphone 5 years ago to communicate with his family via messenger apps
- He does not like applications because of the typing work and often unwanted entries happen to him, but uses it now and then in his everyday life, e.g. to retrieve timetable information
- Nevertheless, he possesses a wide collection of different applications about which he exchanges himself with his social environment
- He doesn't like health apps very much and rather associates them with surveillance
Peter, born 1940 (77 years old)
Retired for 12 years, formerly a master craftsperson in horticulture

Personal background
- After an apprenticeship and a subsequent master craftsman's examination, Peter works in horticulture until he retires
- He and his wife live in a self-built house in the countryside and thereby fulfilled their dream of owning their own home
- They have a daughter who visits them irregularly with their grandchildren

Health situation
- Peter suffers from slight overweight and has already had two heart attacks due to the fact that he is only allowed to do light sports
- He understands well the health measures recommended by his doctor
- He tries to maintain a healthy lifestyle in order to prevent further heart attacks

Health-related information
- Peter doesn't like to talk about health-related topics in his social environment because he has had bad experiences with them
- He finds it difficult to understand bills for medical treatments and drug interactions
- He is only moderately interested in health-related topics and trusts the expert feedback of his doctor about his lifestyle
- If he informs himself about it, he does so via magazines and the Internet

Attitude to technical
- Peter and his wife own an old desktop PC, which he rarely uses in his everyday life
- His wife uses it the most and takes over installations together with his daughter
- Sometimes he uses the desktop PC for research, writing letters or mails and playing small preinstalled card games
- For professional reasons, he bought an old mobile phone 17 years ago and still uses the same model today
- He considers applications and smartphones to be nonsensical, and dealing with new technical products such as touch technology does not cause him any great problems or interest
Karin, born 1943 (74 years old)
Retired for nearly ten years, alteration tailor

Personal background
Karin trained as an alteration tailor. After the birth of her children, she was a housewife until they reached school age, when she returned to her profession. She worked there until she retired almost ten years ago. She lives with her husband in their own house in the suburbs. Their children live nearby and visit them regularly with their grandchildren. In addition, after the children moved out, Karin and her husband adopted a foster child, with whom they have a good relationship.

Health situation
Karin suffers from arthrosis and has hyperthyroidism. This is associated with high blood pressure. For this reason, she must pay more attention to her nutrition and take medication. She does not want to undergo surgery for hyperthyroidism and has adapted to her illness accordingly. The only pain she feels as really burdening is the pain caused by her arthritis.

Health-related information
Karin is unbiased toward health-related information. Although she has no particular difficulty in understanding most of it, she is really only interested in a few questions that concern her in particular. It is difficult for her to differentiate which information is credible in the media, such as on television, in magazines, or online. She prefers to talk to her doctor about health-related issues or consult with her family and friends instead of relying on these media. She has no problem understanding and applying health-related matters and advice given by doctors or family and friends. An example of this is the use of new drugs. If she discovers that her symptoms get worse when taking a new medication, she tries to find out for herself why before going to her doctor.

Attitude to technical devices
Neither Karin nor her husband is particularly curious about technical developments. She owns a desktop PC, which her children gave her after her old one became too old to use after 13 years. From time to time she uses it to type letters, read e-mails, or look up timetable information. Otherwise the PC is mainly used by her husband. As in most cases, she uses traditional media, such as paper calendars. She doesn’t believe in social networks, video telephony, or SMS. When using a smartphone or tablet computer, for example if her grandchildren want to show her something, Karin often feels overwhelmed, even if she knows that this perceived overload stems from her lack of experience. She has only a basic mobile phone with a relatively large keypad to be reachable in an emergency, but rarely has it switched on. She bought her first mobile phone of this kind at the urging of her family. She doesn’t value apps and smartphones and doesn’t like it when her children and grandchildren have their mobile phones in their hands during their visits. She considers the interpersonal aspect to be more important to her, and she believes that this is lost if communication is only via technology. She also finds it difficult to use touch technologies and it causes her headaches to deal with them. Overall, Karin has major problems in operating technical devices, including her desktop PC. The installation of programs is done by her family. She is not bothered personally that she is not technically inclined, but rather that her fellows are technically dependent in her opinion.
Monika, born 1952 (65 years old)
In transition to retirement, musicologist

Personal background
Monika studied musicology with a focus on classical music and then worked for several years for the church before returning to university and taking up teaching there. Now she is in the transition to retirement and is considering continuing her teaching activities at the university for a while. She lives alone in a large apartment in the city. Her husband died a few years ago. They had no children. She has a large circle of friends and both her sister's children and her sister herself visit her frequently. Thus, she is satisfied with her social situation.

Health situation
Monika has a good health situation. Apart from being slightly overweight, she sometimes has back pain. However, she does not find this unbearable. For the back pain she does gymnastics and tries to take long walks. Overall, she pays more attention to a healthy lifestyle.

Health-related information
Monika is quite interested in health-related topics and is actively looking for information that is relevant to her. She usually has no problems in searching for information and understands it well. What she sometimes finds difficult to assess is the credibility of information disseminated in public media, such as television. That is why she is also quite critical of such media and prefers to rely on statements of her doctor or her friends and family. She also finds it difficult to weigh up different treatment methods, especially when she has found the contradictory information on the Internet. Overall, she is satisfied with the sources and information at her disposal.

Attitude to technical devices
She owns some technical devices which she received as gifts, like an e-book reader. They usually lie around for weeks before she gets around to setting them up. Some of the devices belonged to her husband and she kept them, for example his smartphone. She uses this sporadically to take notes or send messages. Her husband also had a tablet, which she occasionally takes to university. However, she prefers to work on her laptop. She has been working with various models for 20 years and still feels the most confident with this type of medium. She uses her laptop every day for work or banking, watching videos, following her e-mail, shopping, and reading messages. Usually her friends or her sister take care of her technical devices, although she has no overview of the installed apps. She finds health apps in particular terrible, as she is afraid of a misdiagnosis. She therefore does not trust the apps. Overall, Monika finds it difficult to deal with technical innovations. However, she is not afraid to use the devices, but simply not very interested in them. This is also reflected in her experience. While she has a good command of mouse control, she has problems using touch technologies.
Renate, born 1948 (69 years old)
Retired for six years, administrative employee

Personal background
Renate completed an apprenticeship as an administrative employee. She worked in her training company until the birth of her children. Afterwards she devoted herself as a housewife to the upbringing of her children. Only when they went to secondary school did she start half-day work again, before she retired six years ago. Her husband and she have their own house in town. Their children often visit them with their grandchildren. One daughter lives in the neighborhood and supports Renate and her husband with the daily tasks.

Health situation
Renate suffers from Parkinson’s. That was also the reason for the early retirement. Thanks to the therapy, her doctors, and the taking of her medication, she has the disease under control and does not find the restrictions unbearable. So far, the disease is not so advanced that she is permanently dependent on help, but she often needs support in everyday life. She also has slightly elevated blood pressure, which she also has under control and perceives as unproblematic.

Health-related information
Renate is very interested in health-related information and actively searches for it. Finding and understanding it is very easy for her. She is especially interested in information about harmful behavior, as well as information on novel treatment methods. It is only information she receives from the public media that she is not sure how to assess. She is particularly critical of TV and magazines. Renate likes to share her knowledge with her friends, her family, and her doctors. Their opinions are important to her, in particular because it allows her to review uncertainties regarding her own examination results or to discuss drug interactions.

Attitude to technical devices
Renate is very interested in technical devices. Because of her work, she got her first desktop PC 16 years ago, which she has now replaced with a current model. She also purchased her first mobile phone almost 13 years ago due to her work. She has since been given an outdated smartphone by her daughter. Her husband also bought a tablet computer four years ago. The two got an e-book reader from their children. She uses the smartphone quite seldom, for example to read e-mails, social networking sites, or SMSs. She uses the tablet, the PC, and the e-book reader comparatively often. With the tablet she looks for information, reads her private messages, and watches videos. She uses the PC for her banking business or for writing letters, but usually prefers to use the tablet. With the PC she sometimes needs support with the installation of programs, but with the other media she manages this herself. Overall, she has no problems with the handling of her devices, because of her illness. She doesn’t like to share private things from her life on the devices, because otherwise they would occupy too big a place in her life.

Renate has several apps installed on both the smartphone and the tablet. These include health apps, such as fitness apps or first aid apps. She likes to arrange them according to a structure that gives meaning. She likes to find out about new apps through her family or the Internet. All in all, she finds health apps useful because they support her in her everyday life. However, she has problems trusting them because she is afraid of technical failure and dependency. At the same time, she often asks herself whether the handling of technology in this form is correct and whether one should not be more critical. Nevertheless, she is quite curious about new technical developments and is able to learn how to handle them quickly.
Angelika, born 1951 (66 years old)

Retired for one year, management consultant

Personal background

Angelika studied business administration and subsequently worked in a management consultancy. After the birth of her son she stopped working for a short time, but quickly returned to her profession. She retired a year ago and is enthusiastically dedicating herself to her grandchildren. She and her partner have their own house in town. Her son lives nearby, so she often looks after her grandchildren, who are of school age. She has a good relationship with her ex-husband.

Health situation

In addition to slightly elevated blood pressure, Angelica often has problems with the stomach, which manifest themselves in the form of pain and nausea. She has to pay more attention to her diet, otherwise the problems would limit her day-to-day life. She has already had an operation on her stomach and is not allowed to eat certain foods. She finds this limitation very stressful, even if she is happy to have been spared from further diseases.

Health-related information

She is only moderately interested in health-related questions and informs herself only casually about these kinds of issues. In general, she has no problem finding and understanding information, but sometimes finds it difficult to follow the instructions for taking medication or to understand the bills for medical treatment. She is quite critical of information from magazines, as she sees this only for its entertainment value and not for its informative value. She takes note of information from television, but has no well-founded opinion on it. It is important to her to be able to discuss information with her family and doctor. The family plays an important role for her. She is not interested in an objective exchange, but rather in their subjective support.

Attitude to technical devices

Twenty years ago Angelika bought her first desktop PC. Currently she has a laptop and a tablet computer. She got the tablet as a gift. She also has a fairly new smartphone and her partner owns an e-book reader. Sometimes she reads with the e-book reader, but she prefers books. She likes to play games with her grandchildren with the smartphone or the tablet. She additionally uses her smartphone for social media, voice messages, reading her e-mails, and for the note and calendar functions. She uses her tablet to watch videos and to access the mobile Internet in the house. On her laptop she does her banking, writes e-mails and letters, and looks for information for everyday life. Angelica’s grandchildren often install new apps on their media during their visit, which Angelica also uses. She also learns about the release of new apps. Sometimes she also looks on the Internet herself. She finds health apps or evaluation apps particularly interesting. She also uses them daily. Overall, she has no problems with technical equipment and would describe herself as curious. However, for new applications she is dependent on her son or grandchildren, who have to explain the handling to her before she can use the devices independently.
Michael, born in 1953 (64 years old)

One more year until retirement, motor mechanic and car developer

Personal background

Michael’s professional career began with an apprenticeship as a car mechanic. After some years in this occupation he studied mechanical engineering and returned to his apprenticeship company in another area of responsibility. He and his wife live in a small house in town. They are married and have two grown-up children, who also studied and founded their own family. Two of his grandchildren are in elementary school, one in nursery school.

Health situation

Michael is overweight, has high blood pressure, and is also suffering from type II diabetes. Due to his health problems, he has to pay more attention to his lifestyle. Michael measures his blood sugar level daily with an appropriate measuring device. He has no problems using the device. The consequences of lack of exercise are expressed in the form of back pain. Overall, however, he does not feel that he is too much affected in his daily life.

Health-related information

In situations where he has to make decisions based on health-related information, he talks to his doctor or family about the relevant issues. When it comes to deciding together with the doctor which treatment method is best for him, it is usually very difficult for him to compare them with each other. This is mainly because there is a huge amount of information. He speaks openly to his doctor about this. He uses his tablet computer to actively search for new information. With the increasing possibilities of information, it is sometimes difficult for him to assess the adequacy of the content. He considers information in magazines and television in particular to be untrustworthy. Furthermore, he informs himself independently about newly released apps, like various fitness apps, pedometers, and other health apps.

Attitude to technical devices

In his spare time he enjoys reading and has bought an e-book reader. He particularly likes the fact that he always has many books at hand. He bought his first desktop PC in the ‘90s. Currently he owns a newer model, which is also technically no longer up to date. That’s why his children gave him a tablet computer four years ago. He now uses this on a daily basis to do online shopping, read e-mails, or listen to music, for example. He also received a smartphone from his son, who got a new one for his birthday. He does updates and installs new software himself, but gets support from his son for unknown functions. All in all, he is relatively curious about new technical developments, but at the beginning he needs a little support in using it. He exchanges technical innovations with his family, friends, and former colleagues, but also likes to browse through sales channels or the Internet. He carries out part of his banking business online and orders products more often with the help of his PC or tablet. He books tickets online and organizes his appointments with his smartphone. In doing so, he sometimes thinks about data protection and asks himself whether his personal profile can be read by third parties.
Hans, born 1950 (67 years old)
Retired for 1½ years, material inspector

Personal background
Hans completed an apprenticeship as a material inspector and worked in various companies until his retirement. He has been retired for one and a half years and enjoys this for example in the form of traveling with his life partner.
They both live in a house in the suburbs. They relocated here after city life became too hectic for them. Both his partner's children and his own children live in the city, but both often visit their families. One of the grandchildren attends secondary school while the others are still in primary school.

Health situation
Hans is overweight and suffers from arthritis. Both increasingly affect him in his everyday life. He takes medication for osteoarthritis and should move more, but he neglects that. Hans also used to suffer from glaucoma. That's why he had to have surgery. He made it through the operation well, so that he now rarely has problems with his eyes.

Health-related information
Overall, he has no problems understanding health issues. Hans only deals with the topic of health as needed, although this happens regularly due to his illness. The only source of information he considers to be really trustworthy is his doctor. Other external sources of information, such as the Internet and family, are rarely consulted. He has little confidence in information from television and articles from magazines. In addition, Hans considers the settlement of medical treatment bills to be a burden. Because he is overweight, he tries to follow the current food debate, but has problems and doubts its reliability.

Attitude to technical devices
He bought his first desktop PC over 20 years ago. He currently owns a laptop, which he uses regularly to write e-mails, use word processing programs, or do other work. Six years ago he bought a smartphone. He first came in contact with such devices via his children. He likes the fact that he can access the Internet at any time and doesn't have to carry calendars or notepads with him. In addition, he likes to use the voice function on his smartphone to save himself the tiresome task of typing on the small screen. His life partner also owns a tablet computer, which he likes to use to pursue various hobbies. The activities include booking trips, obtaining timetable information, online shopping, and multimedia use on video portals. He does most of the installations himself, but sometimes his children also support him. One time he had to resort to the help of a service provider when his computer was broken.
Hans has always been very open-minded about technical developments and learns how to use them very quickly. He likes to use apps, both on his smartphone and on the tablet. However, he doesn't use them for a long time, because he quickly loses interest in them. He likes to inform himself about apps with his family, friends, and acquaintances, on sales platforms or on the Internet. He has already tried out various health apps, but he fails because of the lack of motivation to use them regularly. He finds health insurance company apps which he can install on the tablet to be exciting. There is nothing against its use for him personally and he considers the discussion of data protection as well as questions of trust to be exaggerated.
Klaus, born 1944 (73 years old)
Retired six years ago, teacher and specialized employer for administration

Klaus studied to become a teacher and worked as a teacher for several years but then changed profession and became a specialized employer for administration. There he gained a higher position and, despite reaching his retirement age, he stayed in his profession for a further two years.

He lives with his wife in a house in town. They have three children, all of whom have also started a family. They are scattered all over Germany. That's why he set up a guest room in the house. One of his grandchildren, who often attends advanced training courses in Klaus's home town, uses this regularly.

Klaus suffers from high blood pressure and rheumatism, which is why he has to take medication regularly. The pain associated with the disease often occurs, which is why it quickly becomes exhausting in everyday life. He finds it difficult to assess the interaction of medications. In particular, if his doctor prescribes a new medication for him, he asks him to inform him personally about the interactions.

Overall, Klaus understands well what doctors are discussing with him. With his family, on the other hand, he is generally reluctant to talk about health-care issues or diseases, unless he has no other choice. He doesn't want health issues to dominate his everyday life. Klaus has little interest in his diseases and health-related topics and reads information rather casually. He finds it easy to find and filter important information for him. He searches for general information mainly on his desktop PC or in books. He tends to take a critical view of other media such as television or magazines and questions the information received there. With regards to the recommended preventive examinations, however, he is consistent and attends these appointments regularly, since he thinks that this is better than dealing with potential diseases.

He has a desktop PC, which he bought shortly before his retirement and which he uses regularly. He conducts his banking transactions online and also passes on confidential information via the Internet, such as e-mails. He also does most of the installation of programs himself and only sometimes gets the support of his grandson, who is a frequent guest. He also owns a smartphone. He bought it five years ago to communicate with his family via messenger services like WhatsApp, but doesn't really like it because of the typing. However, since the family lives so far apart, this is one way for him to keep in touch with them. In addition, he likes to use the smartphone in his daily life, e.g. to call up timetable information, take notes, or read the news. He has a large number of apps that he uses every day. He likes to exchange information with his family and friends about new and interesting apps. He rarely rummages on sales platforms himself. However, he does not like the fact that communication takes place partly only via these media. He doesn't have a tablet computer. He is perfectly satisfied with his desktop PC in combination with his smartphone. When it comes to operating his PC and smartphones, he is relatively safe, but often has the problem that he makes unwanted entries, in the form of typing errors for example, and therefore needs more time for the intended tasks. That's why he does many things that require typing, such as writing e-mails or letters, on the desktop PC. He personally doesn't think much of health applications because they are always associated with monitoring and control.
Peter, born 1940 (77 years old)
Retired for 12 years, formerly a master craftsman in horticulture

**Personal background**
Peter did an apprenticeship in horticulture, followed by a master craftsmanship in this field. Until his retirement he worked in the same company and was always completely satisfied with it. Peter and his wife live in a self-built house in the country. They both used to live in the city, but it has always been Peter’s dream to live in his own home. The two have a daughter who visits them irregularly with the grandchildren. The grandchildren are still at school.

**Health situation**
Peter is slightly overweight and has already had two heart attacks. He understands the health measures recommended by his doctor well. His extra weight bothers him personally, but he is only allowed to exercise lightly because of the heart attacks. In general, he tries to maintain a healthy lifestyle in order to prevent further heart attacks and is also very careful.

**Health-related information**
Peter has had bad experiences with advice from friends and family on health questions in the past. That’s why he’s become more careful about that. He does not believe that his social circle is well informed about health topics and doesn’t like to talk about it with his friends and family. He also finds it difficult to understand the billing of medical therapies and often does not know how his medication interacts with each other. He is only moderately interested in health topics because he finds that the topics occupy enough space in life. Most of the time, he reads information in magazines or on the Internet or looks at it casually on television. He finds it difficult to assess the credibility of information from different media. He prefers to leave expert feedback on health influences of his lifestyle to a doctor.

**Attitude to technical devices**
Peter and his wife have owned desktop PCs for the past 17 years. The reason for the purchase was his wife’s desire for it. She still uses it the most. Peter himself rarely uses it and doesn’t really need it in his everyday life. Relevant updates and installations are usually carried out by his daughter or wife. In addition, Peter has an old model of a mobile phone. He also bought the first one 17 years ago, because his profession made it necessary. He has always purchased this type of mobile phone, even if the exact model is no longer produced. He thinks applications and smartphones are nonsense and can do without them in his life. In exceptional cases, he uses the desktop PC only for writing letters or e-mails. He occasionally reads messages or plays small card games preinstalled on the desktop. Otherwise he uses traditional mediums. Basically, Peter has bigger problems with the handling of technical products. He has difficulties with touch technologies, such as smartphones, and therefore doesn’t like them very much. Sometimes he even has difficulties with the handling of a computer mouse. He is not very interested in new technical developments and it is difficult for him to use them. He is not very curious about new technical developments and therefore finds it difficult to use them. He is particularly afraid of not being able to operate new devices.