The German population will age and decline steadily over the coming decades. Until 2060, the 65+ age cohort will be the only one which grows while all other age cohorts will shrink.

Over the past decade the share of the population that uses the internet has continued to grow. There is still considerable latent growth potential in the 60+ cohort: More than half of them do not use the internet at all.

Older people, especially the 65+ group, buy different goods online than the younger cohorts. They prefer to buy essential goods online while the younger generation mostly purchases luxury and entertainment goods.

The elderly (55-75) are on average financially better off than younger age cohorts. In addition, credit demand of this age group has increased over the past ten years. Hence, the economic potential of senior citizens should not be undervalued.

Demand for web-based (mobile) financial services is set to increase significantly in the medium to long term. In 2030, for example, a total of nearly 44 million Germans are expected to be familiar with online banking services (2010: about 27 m). A quarter of this figure will be aged 65+. In 2012 already 43% of the internet users aged 65+ have used online banking.

In the future, security and data protection on the internet will play a huge role (not only since the debate about the NSA arised). It is not only silver surfers who are afraid of these leakages, but also the younger age cohorts. It is important to educate the population and to promote safeguarding and online security.

How many hours in the Word Wide Web?

<table>
<thead>
<tr>
<th>% of population, by age cohort, DE, 2013, [n=3,751]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>18-24</td>
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<tr>
<td>25-29</td>
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<td>30-39</td>
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<tr>
<td>40-49</td>
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<tr>
<td>50-59</td>
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<tr>
<td>60+</td>
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</tbody>
</table>

Source: Forschungsgruppe Wahlen
Silver surfers

Demographic change: An ageing and shrinking population in Germany

Germany’s demographic structure is changing. The gap between the young and the old will widen, according to forecasts by the Federal Statistical Office. I.a. it provides two scenarios which differ with respect to net immigration. Both scenarios come to the same conclusion: Between 2010 and 2060, the 65+ age cohort will be the only one to grow. All other age cohorts show a decline of around 30%, leading to a slump in the overall population size.

The ageing of the population has an impact on the use of the internet and also on consumption patterns in Germany. Especially the elderly have and in the future will have more influence on the design of products, services and processes on the internet, of course, taking account of the (future) limits on personal income. The economic potential of silver surfers with regard to future consumption is high.

Silver surfers are defined as an increasingly heterogenous, older population group which uses the internet. It is important to notice that all elderly cannot be lumped together concerning income or consumption: some older people are still economically active while others have already withdrawn from working life. Most of the 50-59 years-old live in family households or still support children, whereas at an advanced age the majority lives in single or two-person households. In the literature there is no clear definition of the exact age. In our snapshot, we define silver surfers as internet users aged 55 and over.

High growth rate of internet use

Over the last decade, the number of Germans using the internet has swollen to a total of roughly 56 million, with around 20% of the population not being familiar with digital channels. Up to now a general rule has applied that the older the people, the more often they are unfamiliar with the internet or have only indirect contact. While the growth of internet use among the younger generation has naturally slowed down, quite the opposite is true for the elderly: the number of silver surfers on the World Wide Web continues to increase strongly from a low base. As regards digitisation, people are now on the cusp of a transition process. In the long term, ageing and the behavioural effects of demographic change will increase the number of internet-savvy people. The cohort effect (ageing effect) says that the behavioural pattern of a young generation continues as it grows older: for example, if the 25-44 age cohort shows a 65% share of online banking users in 2020, at least 65% of the 45-64 cohort will also be online banking users some 20 years later.

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1 Both assume a birthrate of 1.4 children per woman and similar average life expectancy. But scenario I assumes a net immigration of 100,000 people per year and scenario II assumes a net immigration of 200,000.
In addition, the behavioural effect can spread, i.e. the number of online banking users can increase further if the potential within the age cohort has not yet been exhausted. Both effects combined result in the fact that the number of online banking users will remain at least constant in generational terms and further user potential may be tapped within the cohort.

Future silver surfers will take the internet for granted. Usage therefore will be more equally distributed among the age cohorts. The question in the future will no longer be whether people use the internet, but rather whether they tend to be active or passive users and which medium they prefer to use for access.

Less electronic devices

An overwhelming share of German households is equipped with web-based and mobile devices. The relatively straightforward convergence of information and communication technology (ICT) enables many people to benefit from the latest technologies relatively promptly and inexpensively. In general, silver surfers own less electronic devices than the younger age cohorts. This is especially true of recently introduced technologies (e.g. smartphones, tablets, e-readers). Most young people are more internet-savvy and adopt the new services or products faster than the elderly. But digital mobility is the next logical stage in the evolution of the internet among all age cohorts.

Internet behaviour: Age-related differences among generations

While the older generation is less often online and owns fewer mobile devices, internet usage does not differ massively among age cohorts. Independent of age, the top two areas on the internet are sending/receiving e-mails and using search engines. However, silver surfers are more often interested in test results, sport news or websites about family and children. Hence, the seniors use the offers on the web as a medium to facilitate their daily lives. By comparison, the younger generations use the internet more often for fun and entertainment. For example, they look for cinema listings or check out communities and forums.

It seems that social networking platforms are considerably more important to the younger generations: about half of those aged 14 to 19 say that they cannot imagine life without social networking platforms anymore (chart 7). In Germany, around 80% of this age cohort uses these platforms to communicate with peers and share digital content while only 21% of those aged 50-64 used it in 2012. In the

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3 Werben & Verkaufen (04/2012). Silver Surfer wollen praktische Lebenshilfe.
Silver surfers

Social networking platforms - increasing lock-ins over all age cohorts

% of population, by age cohort, DE, [n=8,623]

![Chart showing increasing lock-ins of social networking platforms over all age cohorts.](chart.png)

Source: IfD Allensbach

Mobile and social networks are essential

% of population, by age cohort, DE, 2012, [n=8,623]

![Chart showing the percentage of people who cannot imagine life without mobile phones or social networking platforms across different age cohorts.](chart.png)

Source: IfD Allensbach

Online banking - fears of internet fraud

% of population, by age cohort, DE, 2012, [n=1,002]

![Chart showing the percentage of people who are afraid of online banking fraud across different age cohorts.](chart.png)

Source: (N)ONLINER Atlas 2013

past few years, the platforms saw user number grow in all age cohorts. Even membership numbers for senior citizens have grown by around 18 percentage points since 2008. So the demand for social connectivity exists not only among the younger generations, but also among the older ones.

The older people get the more likely they are to suffer from physical problems than the younger cohorts. This has two implications for older silver surfers. First, learning is more difficult for the elderly. So the complexity of new products or services poses a challenge to them. This relates not only to the handling of new devices but also to the use of the internet. Additionally, most websites are designed by young people for young people. This has consequences for the design of web pages: the structure, the font size and the unfamiliar type of language might confuse older people. Second, physical health declines with increasing age. Visual constraints or motor impairment are highly represented in the older age cohorts which makes the use of the internet even more difficult.

The internet can give socially isolated elderly people an option to participate in public life and enrich their private lives. Despite physical difficulties, they can stay in touch with the family (children, grandchildren), get to know new people (peers) and use barrier-free services on the internet. Additionally, they can use the internet as a medium to communicate with doctors or hospitals. More and more senior citizens recognise these advantages and will certainly use these (health) services more often in the future.

Security is paramount for all age cohorts

All generations still have doubts about online financial services, especially with regard to online banking (e.g. data security, credit card information, etc.). Interestingly, people aged 34 or younger are more often afraid of internet fraud than silver surfers. They might simply know more about possible risks and opportunities for fraud. Today, security or data protection concerns are the most important reasons for staying offline. Providers must take these worries into account and inform all internet users about online risks, threats and safeguards. Against the backdrop of the current NSA surveillance scandal, security concerns on the internet are seen in a different light and the dimension of the debate is changing. The massive public attention supports the

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8 Werben & Verkaufen (04/2012). Silver Surfer wollen praktische Lebenshilfe.
10 D21-Digital-Index (2012). Auf dem Weg in ein digitaales Deutschland?!.
11 E. g. phishing, hacking, identity theft, etc.
increasing demand for security options. The security debate is also important in respect to online commerce. 20% of those aged 65+ still buy their products only offline without exception.

**Economic potential for online commerce**

In spite of security concerns, more and more people use retailers’ digital distributive channels. The silver surfers prefer to buy different goods on the internet than the younger generations. Those over 65 mainly buy things like medicines, electronic household aids and books, while those aged 14 to 19 use online commerce to buy clothing, tickets, music and books, for instance. This is not surprising: the consumption pattern and the physical status of the age cohorts differ and this is reflected in their purchasing behaviour. Even though a lot of older people already buy products online, online-retailers should in future pay more attention to their economic potential. Online retailers provide services and opportunities a brick-and-mortar store cannot or does not provide (around-the-clock availability, variety of products and information, doorstep delivery). Particulary older silver surfers with physical constraints can take advantage of barrier-free opportunities.

**Appealing applications used in e-commerce**

Among other things, Quick Response (QR) codes provide consumers with additional product information when making a purchase decision. Today, 38% of all smartphone owners use QR codes but they are more well-known among the younger age cohorts than the older ones. Possible applications of QR codes are for example research online but purchase offline (Ropo I) as well as research offline but purchase online (Ropo II). Ropo I means that customers gather information on the internet, e.g. via price comparison websites, but purchase the good in a brick-and-mortar store. Ropo II is the opposite where the customer goes to a store and gathers information from

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**Who buys which good online?**

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<thead>
<tr>
<th>% of population, by age cohort, DE, 2013, [n=1,063]</th>
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<tr>
<td>Books (E-books)</td>
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<td>14-29</td>
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**QR codes still not very common**

<table>
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<th>% of smartphone users, by age cohort, DE, 2012, [n=439]</th>
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<tr>
<td>14-29</td>
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<td>13</td>
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**Research online, purchase offline [Ropo I]**

<table>
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<th>% of population, by age cohort, DE, 2012, [n=1,063]</th>
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<td>14-29</td>
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<td>14</td>
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**Research offline, purchase online [Ropo II]**

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<th>% of population, by age cohort, DE, 2012, [n=1,063]</th>
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<td>14-29</td>
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<td>18</td>
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</table>
Silver surfers

a salesperson before purchasing the good on the web. In both fields, the silver surfers are the least interested age cohort but they are more interested in Ropo I with more than 79% using this method.

Another aspect of online commerce is the increasing use of the various loyalty programmes. The latter try to attract customers with new and additional services. Loyalty programmes on the internet are not very common yet but the younger cohorts are more likely to use them than senior citizens. The providers see high potential for these online loyalty programmes because the number of people reached can be increased easily with e.g. geofencing services also in a mobile content. But their challenge is to make loyalty apps interesting for all age cohorts by simplifying their usage and making them more intuitive and less complex. At the moment, though, the providers are not very successful in fulfilling the heterogeneous requirements of the different age cohorts.

Financial resources and credit demand

The general increase in private household incomes as well as in private consumption spending in the past did not really come as a surprise. There are research papers which confirm the trend that the income situation of the older generation in Germany has markedly improved over the past years.\(^\text{12}\)

Today the elderly are on average financially far better off than younger cohorts. In addition, credit demand has grown especially among the older age cohorts in the last ten years. This is reflected in higher credit market participation of people aged 55 to 75. This previously barely addressed customer group might harbour higher economic potential for banks in the future than today.

Additionally, the credit redemption rate paid by older age cohorts is noticeably higher than for younger cohorts. This implies a smaller loan loss ratio relating to senior citizens. Due to the demographic change, this might make it even more profitable for credit institutions offering innovative opportunities for customer segments between 55 and 75.\(^\text{13}\)

12 E.g. SCHUFA Kredit-Kompass 2013.
13 SCHUFA Kredit-Kompass 2013.
Silver surfers

65+ will become largest online banking user group

In '000, by age cohort, DE, [Scenario 2]

More online banking users in the distant future

In contrast to the relatively rapid growth of internet users, the number of online banking users is set to increase only moderately in the coming years because the barriers to online banking are (still) relatively high especially from the user's perspective. The 65+ age cohort will post the largest growth and will become the biggest online banking user group in 2060. The willingness of consumers to use digital financial services hinges on many (in some cases: soft) factors. Not only security concerns but also customer acceptance, trust, design and no doubt user-friendliness will play a crucial role. Moreover, in the future there will still be people deciding against using online banking.

Nevertheless, as things stand today the supply of digital (mobile) financial services shows sizeable growth potential and offers considerable scope for a further expansion of web-based online services among all age cohorts.

Preferred payment methods

The elderly shy away from unknown products: 45% of those over 65 are uncomfortable with trying new things online. While older silver surfers (65+) mostly prefer traditional payment via invoice, advanced payment or direct debit, the younger generations are more likely to use recently introduced online payment methods like PayPal, ClickandBuy or other digital payment solutions by niche providers. Recently, there are experiments regarding alternative payment methods using QR or NFC (near field communication) technology. It is not clear yet whether these will prevail in the market for web-based payment methods and become accepted by the consumers.

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