



Majority of bank customers in Germany do research online

Findings of a clickstream analysis

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The internet is of fundamental importance when researching financial topics. Over 60% of internet users visit websites dealing with financial topics; 20% submit search queries concerning financial matters. The majority of German bank customers thus use online research as an element of their financial decision-making process. Customers can use the internet to study information at their leisure, compare the conditions offered by competing providers, read background reports and follow current developments.

ROPO effect: customers combine online research with an offline purchase. Many customers value their bricks-and-mortar branch for the personal service they receive and the opportunity to validate their opinions during an appointment with their advisor. Our analysis shows however that already the majority of offline purchases are preceded by an online research process. This ROPO effect (research online / purchase offline) applies to 48.6% of new contracts. Pure online sales (10.8%) thus significantly understate the importance of the internet.

Search engines are the most important independent source of information. Google is used by more than one-third of all bank customers who do research on the internet before signing a contract. No other independent source of information has a greater reach. The research conducted by Google users is also more intensive: they visit more than twice as many domains as other surfers.

Customers gravitate towards familiar brands and financial institutions. For their research most users surf directly on the websites of financial institutions and other sources of information that they know. Most search queries also include brand names. All the same, we find that prior to actually signing a contract for a financial product customers more often search beyond familiar brands.

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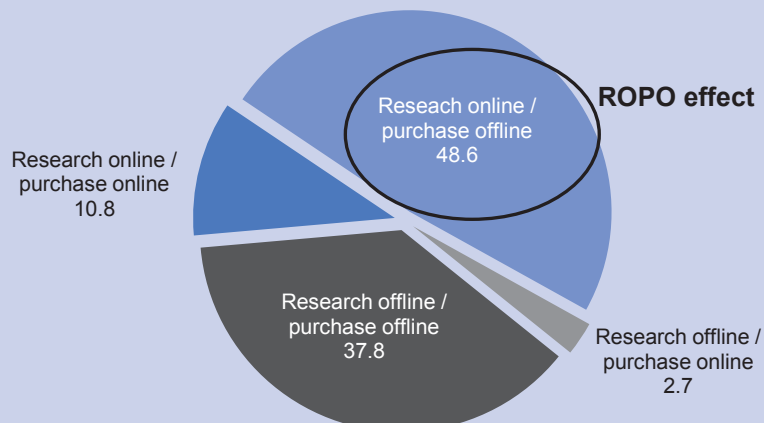
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Online channel is of fundamental importance

Share of new contracts, by research and sales channel, (%)



Source: GfK, Google, DB Research, 2010



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Deutsche Bank Research

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For over 10 years Deutsche Bank Research has been investigating the impact of the internet revolution on the economy, banks and society. The quarterly [E-Banking Snapshot](#) describes current trends in areas such as online banking.

Further information is available at <http://www.dbresearch.com/digitaleconomy>

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1. Analysis: How do bank customers carry out their online research?

1.1 Introduction

The internet has dramatically expanded the options available to bank customers over the last 15 years: with just one click transactions can be completed, the terms and conditions offered by different providers can be compared or background information on products can be gathered. Internet platforms are used for swapping financial tips or rating the quality of advice that branches provide.

How do customers conduct their research into financial products on the internet?

Our focus in this report is on online research: in which way and how much do bank customers use the internet to gather information and select products? How do consumers generally carry out their online research into financial products? In order to answer these questions, we have conducted an extensive survey to record the online behaviour of a representative sample of people and evaluated their financially related internet traffic (passive measurement of user behaviour). The end product is a unique documentation of the online research process and its importance for the decision-making of internet users and bank customers in Germany.

This report is the result of collaboration between GfK, Google and Deutsche Bank Research. The report is based on data collected regularly by the GfK for the Financial Market Panel (FMP). Some 20,000 households report to the GfK on their contacts with the providers of financial services, contracts they have signed or terminated, the channel used to do so and their motives for doing so. A subgroup of 5,000 households from this panel also participates in the Media Efficiency Panel (MEP). It is an innovative method of documenting the internet activities of every user in a household, identifying the advertising displayed and recording all the search queries submitted by users (a passive measurement of user behaviour).

Confidentiality guaranteed

Participation in the Media Efficiency Panel is of course voluntary and transparent for users. The data collected are evaluated by GfK in an anonymised form. In the course of conducting this analysis neither Google nor Deutsche Bank had access to the personal data or the individual surfing patterns of participants.

The report is divided into two sections. In the first section we describe the survey design, its benefits and limitations, present the key findings and offer an initial interpretation. In the second section, starting on page 17, we present a detailed synopsis of all the findings in the form of charts with brief explanations.

1.2 Survey design

The unique feature of this report is that it combines a questionnaire with the measurement of actual internet traffic. All participants in the MEP agree to install a short program in their internet browser that sends the GfK server information about the URLs accessed, the advertising displayed and the search queries. This is an extended form of clickstream analysis.

The thereby collected pool of data is screened for websites and search queries relating to the financial market, which are then assigned to specific categories, e.g. products or brand names. This allows, for example, the measurement of how often and how long customers spend on webpages that provide information about



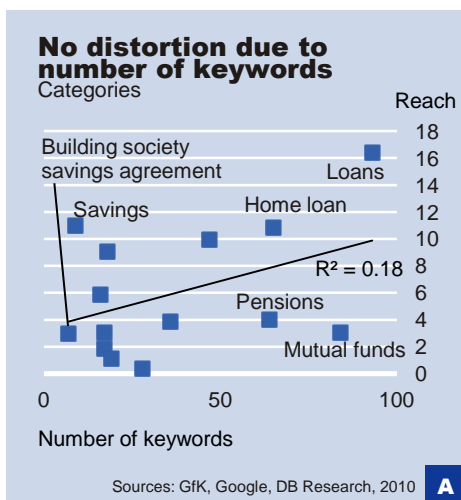
instant access savings accounts or how often they use a search engine to look for brands, products or a combination of both.

Taxonomy of webpages and search queries

Webpages and search queries are assigned to specific brands, products or topics according to a predefined keyword list drawn up by GfK, Google and Deutsche Bank. This list makes a strict differentiation between brands (such as “Deutsche Bank”) and generic terms. The generic terms, on the other hand, consist of products (e.g. “fixed-term deposits”) and general financial topics (such as “highest interest rates”, “pensions”) – the study uses the equivalents in German, of course. Each webpage or search query can be allocated to several categories of product, brand or topic. Allowances are made for typical spelling mistakes.

We also allocate every product, brand or provider to a master category: savings products, for example, belong in the investment master category; for Deutsche Bank the master category is private-sector banks. This is necessary because many clients conduct their research according to specific requirements (e.g. investing money, making provision for old age) that can be satisfied using a variety of products. With the providers it makes the most sense to amalgamate fragmented groups, such as the different savings banks, and assess them as a single entity.

The number of keywords differs according to the category: we have lots of keywords for credit and mutual funds products, but relatively few for building society contracts. This could distort the reach data¹, after all more keywords could also mean more registered clicks. This is, however, not the case. In fact there is no statistically significant correlation between the number of keywords and the reach measured per category (see chart A). The reason for this is that keywords themselves are also used to differing degrees. The categories thus correspond with the real search behaviour of the users. One category with few, but frequently used keywords can thus have a higher reach than a category with many but exotic keywords.



Focus on real online research processes

25 ½ million Germans use the internet for online banking. In most cases customers want to check their balances online, make credit transfers, purchase securities or complete other simple transactions. These transactions would distort the findings of this report, since customers who, for example, are checking their account balances do visit their bank’s website but are not necessarily interested in obtaining additional information about financial topics or bank products. The reach and the number of clicks would be excessively high due to online banking.

In order to distinguish genuine online research processes from transactions (i.e. online banking) we only count clicks on publicly accessible webpages where banks, for example, provide information about products and conditions. As soon as customers register to use online banking they leave the public section of the website and continue their surfing on the site’s secure pages. From then on the primary interest tends to be in transactions and the search function

¹ We define the term reach as the share of internet users who have visited websites for specific products, providers or topics or have submitted corresponding search queries during a specific quarter.

² Furthermore, data protection legislation prohibits the analysis of encrypted web pages.

³ Since the question about the sales channel is one element of the FMP

75% of clicks are for transaction sessions

becomes secondary. Since online banking in Germany is always conducted via encrypted webpages (HTTPS) there was no logging of any sessions in which customers visited one encrypted and a maximum of one unencrypted financial page (e.g. the homepage). We call them transaction sessions.² Of course it cannot be ruled out that individual customers also search for new information concerning financial topics during transaction sessions. We do not, however, find any major discrepancies in the findings arising from this distinction.

Overall, transaction sessions account for some 75% of financially related internet traffic and are not incorporated into this report. The reach values measured by us are, however, largely unaffected by whether we count in the transaction sessions or not. The reach on financial search queries, for example, is 20% including the transaction sessions and 18% excluding them. This shows that customers' online research processes are actually conducted mainly outside transaction sessions and that we do not have to expect any major distortions to result from excluding these transaction sessions.

Combined analysis provides complete picture

GfK, Google and Deutsche Bank Research collaborated with the service providers SirValUse and nurago (for the technical implementation) on this report's design, implementation and evaluation. For the first time in this report we link survey data (FMP) with the measurement of actual internet traffic (MEP) in the financial sector. Since many customers switch back and forth between being online and offline only a combined analysis can deliver the whole picture.

Customers underestimate online research in surveys

Previous research conducted into internet use by bank customers has primarily been based on surveys: questionnaires are a relatively good means of establishing the volume of contracts signed (online or offline) and investigating the motives and motivations of customers. The online research process, by contrast, is difficult to capture, as online research into financial topics often takes many weeks and tends to be underestimated by respondents. For instance, in a survey of bank customers just 3% of respondents said that they had had online contact with a financial services provider prior to signing a contract offline (e.g. at a bank). Our data reveals, however, that actually 48.6% of customers carried out financial research online before signing contracts offline. Yet, this figure could only be established because we linked the number of new contracts signed at bank premises (FMP survey) with the clickstream analysis (MEP).

Including and excluding contract completion

In our analysis we make a fundamental distinction between two groups. The first group are customers who signed a new contract for a financial product in H2 2009 (online or offline); the second group are all internet users who do online research into financial topics.

For the first group, customers with new contracts, we define an online research process as starting up to 14 weeks before the contract is signed. We consider all the financial search queries and webpages visited during this period to be elements of the online research process. Only if no financial research is carried out for 30 successive days is the process regarded as having ended (blackout

² Furthermore, data protection legislation prohibits the analysis of encrypted web pages.



period). Since we capture all contracts signed in H2 2009 this means that we analyse internet traffic from April 2009 – that is 14 weeks before the first possible opportunity to acquire the product. Households in the MEP signed a total of nearly 500 contracts; in 296 of these cases we detected an online research process, that is financially related internet traffic prior to the signing of the contract. Since customers sometimes sign contracts for several products at the same time this leaves 219 independent online research processes to be analysed.

The second target group of our analysis is the financial research of all internet users, regardless of whether they have signed a new contract for a financial product. This supplementary detail is important because contracts for financial products typically apply for the medium to long term – for many products the turnover rate is low. Nearly all Germans have a current account, for instance, but only 4.2% of them opened a new account in 2009. In the end the decision not to buy a new product is often also an implicit decision to maintain the contractual relationship with their existing provider. Many customers check on the internet whether the terms and conditions for their products are competitive and decide where appropriate to switch to a different provider. So were we to analyse only the new contracts signed we would understate the influence of online research on bank business.

Limitations of the analysis

The empirical findings of this report are based on representative samples and provide what we consider a realistic picture of financially related internet usage. Nevertheless, it does have limitations that need to be pointed out.

- Clickstream analysis can only record participants' internet traffic on their private computers. We cannot monitor usage in the workplace, at friends' homes, in internet cafés, or on mobile devices since no additional programs for measuring traffic are installed in those browsers. At work in particular, private surfing does also take place. The reach and intensities measured should thus be regarded as minimum values.
- With their demographic and socio-economic characteristics the participants in the FMP and MEP constitute a representative random sample of the German population. This gives rise to the risk of selection bias beyond these characteristics. The GfK, however, continually checks potential explanatory variables in order to guarantee high panel quality. Furthermore, panel members have long-term ties with the GfK, which establishes a relationship of trust and reduces selection bias.
- Furthermore, participants might change their online behaviour (consciously or unconsciously) if they knew that their clicks were being recorded and analysed. However, this effect is minimised by the non-reactive measurement (i.e. internet usage is not disrupted by the measurement). Systematic changes in behaviour appear to be unlikely: the number of visits to sensitive webpages (such as those providing adult content) tallies roughly with the average for other users.
- The survey period Q2-Q4 2009 was dominated by the special circumstances surrounding the financial and economic crisis. As a consequence of the spike in uncertainty the number of new contracts signed for financial products in 2009 was around 1/3 lower than in 2007. This means that the numbers of customers

with new contracts are in some cases smaller and we can only make statistically sound statements about master categories but not for individual products or providers. The financial crisis may furthermore have increased the public's general need for information about financial topics. This would result in our tending to overstate the reach levels. However, the most important events (the collapse of Lehman Brothers, the deposit guarantee granted by Germany's federal government, financial aid for Greece) occurred either before or after our survey period and cannot influence the reach measurements. Also the high proportion of brand-specific internet traffic shows that general topics are of less significance and therefore we do not expect any major distortion.

1.3 The key findings of the report

1. *The branch is currently still the primary sales channel for banking products*

Online contract share has risen by 60% over the last 5 years

Over 80% of all new contracts for financial products were signed at branch premises in 2009. Just under 11% were concluded online – with the remainder being effected via other channels (see chart 5).³ The online channel is growing fast: in the last five years its share of new contracts rose by a total of some 60%. Despite this development the branch is currently holding its own as the primary sales channel for new banking products.

The choice of sales channel follows both the demographic characteristics of clients – young consumers are more open to the internet – and the complexity of the product. This complexity results from a combination of the difficulty of the topic and the effort involved in the processing:

- For very comprehensive topics that are long term in nature (e.g. old-age provision, home loans) many customers look for individual and trustworthy advice.
- In discussions with qualified client advisors previously gathered information can be mentioned and validated, i.e. customers gain the certainty that the information obtained from their own research is correct and that they have not overlooked anything important.
- The branch is often more convenient when the processing work is extensive (e.g. arranging a home loan).

Customers switch between different channels: they choose the online channel with above-average frequency for straightforward, easily understandable products like instant access savings accounts (27% of all new contracts), credit cards (19%) and fixed-term deposits (17%). At the same time they use the branch for obtaining advice on complex topics.

New contracts in 2009 were heavily impacted by the ramifications of the financial crisis: especially instant access and fixed-term deposits held little appeal because of the low interest rates they had been offering. Since such accounts are opened online in particularly large volumes, this stagnation also weighed on the overall online share of business.

³ Since the question about the sales channel is one element of the FMP questionnaire, it is a matter of interpretation for the customer to which channel they assign the newly signed contract. The facility to conclude a new contract completely online does not exist for every financial product. When opening a new account, for instance, a personal identity check has to be conducted (e.g. via Postident in Germany).



2. ROPO effect (research online / purchase offline) applies to nearly 50% of new contracts

The large numbers of contracts signed in branches mask the key role that the internet plays in shaping the purchasing process. Many offline contracts are preceded by online research: customers surf the internet to study background information on the products, compare the conditions offered by different financial institutions and follow current developments. They determine the pace and the depth of the research and thereby gain control of the flow of information. Very few customers today sign a mortgage agreement or follow-up financing agreement without having trawled through the internet to find out the typical conditions currently offered by the market. This phenomenon is what we call the **ROPO effect** (research online / purchase offline).

ROPO effect covers 48.6% of new contracts

We measured a ROPO share of 48.6% of all new contracts (see chart 8). This means that if one were to examine just the 11% of contracts that are processed exclusively online this would significantly underestimate the role of the online channel. Of course customers carry out their online research with starkly contrasting degrees of intensity before they sign the contracts. The majority of customers only visit one or two different financial domains (see chart 13). Moreover, the purpose of online research cannot always be unequivocally attributed to the purchased product but is sometimes conducted to obtain information about other financial products. Online research thus provides many customers with an initial overview or already yields answers to specific detail questions at an early stage.

ROPO customers and pure online customers share similar internet traffic patterns (see chart 10). On the number of search queries, however, there are significant differences: ROPO customers submit 50% more search queries (10.9 vs 7.1); at the same time, they visit a slightly smaller number of financial webpages (41.5 vs 47.1).

Online only customers are particularly price sensitive

The differences in motives are more remarkable. Pure online customers, i.e., those who research and purchase online, report particularly often that prices and conditions were the key criteria in their decisions – they search online, for example, for instant access savings accounts with the highest interest rates and the cheapest credit cards. ROPO customers, by contrast, more often cite the existing relationship with their bank (loyalty) as the reason for their decision, and their focus on quality and service is similar to that of pure offline customers (see chart 29). This shows that online research does not necessarily lead to purely price-driven decisions. As well as attractive terms and conditions ROPO customers also consider quality and service in the branches to be important.

3. Financial research takes several weeks – not only the last click counts

For financial institutions the importance of an online strategy cannot be reduced to the final click. Our measurements clearly show that many customers start their research long before they actually sign the contract.

The duration of an online research process is the time between the first visit to a financial webpage or a corresponding search query and the signing of the contract. The process is regarded as having been ended, though, if no financial research is carried out for 30 consecutive days (blackout period). On average, an online research process lasts 7 ½ weeks. In the course of this process customers

visit an average of 43.1 webpages on 3.8 different domains before signing a contract. It follows that the customers clicked on over 11 pages per domain (see chart 12).

Twin peaks

Behind these averages, however, there is an interesting pattern: 30% of customers – let's call them Group 1 – start researching at a relatively late stage, mostly 2-3 weeks before signing the contract. For another 30% of customers (Group 2), however, the research process lasts 13 or 14 weeks or longer (see chart 11). Whereas for Group 1 presumably the actual purchase is the primary focus of the research, Group 2 is constantly monitoring financial topics.

Loyal customers spend more time on research

There are also differences concerning the motives of customers and the products that are acquired. It is striking that customers that have acquired a product for the purpose of financing are considerably less frequently to be found in Group 2 than other customers. For them, searching online for the latest terms and conditions shortly before signing the contract is probably the primary motivation. Loyal and quality-oriented customers, by contrast, are more seldom to be found in Group 1 and more frequently in Group 2 (see chart 27). For this group of customers the online research process is evidently not a brief search before signing the contract. Rather, these customers are constantly monitoring financial topics on the internet and thereby reaching their decisions over an extended period.

60% of internet users research financial topics online

4. Financial topics have extensive reach on the internet

In a three-month period more than 60% of all internet users surf on websites containing financial topics; 20% submit financial search queries on search engines like Google (see chart 32). Prior to signing a new contract for a financial product 59.4% of internet users conduct online research. Overall, users spend an average of 1 hour and 11 minutes per quarter looking into financial topics online – regardless of whether they sign new contracts or not. This shows the high importance of the internet for financial topics – even leaving aside online banking and new sales.

Of course the usage time does have to be seen in context. Internet users spend an average of 2 hours and 16 minutes online per day.⁴ By contrast, the time spent on financial topics is modest. For typical users financial topics are thus not a favourite subject to which they would devote much time and attention. Rather, users demand condensed information that can be found quickly and is easily understood.

Intensity of use is also very skewed

The intensity of use is also very unequally distributed. The lower quartile of users spend less than 5 minutes per quarter on financial pages. This suffices for obtaining some basic information but can hardly be classified as detailed involvement. The upper quartile, by contrast, surf for an hour or more on financial pages (see chart 33) – enough time for intensive research. However, the distribution is also skewed by a number of very heavy users. Particularly customers of online brokers spend a lot of time monitoring share prices and following financial news.⁵

The internet traffic of the different financial institutions reflects the market share, the client structure and the positioning of the brands online. The latter also depends on how actively the financial institutions promote their online presence, how intensively they

⁴ ARD-ZDF-Onlinestudie (2009).

⁵ Even on online brokerage sites we measure overall only an average usage period of less than one hour per quarter. There are, however, a number of very heavy intensive users of these sites who spend considerably longer online.



Private-sector banks achieve greatest reach

attempt to make contact with typical online target audience – and whether they offer special conditions online.

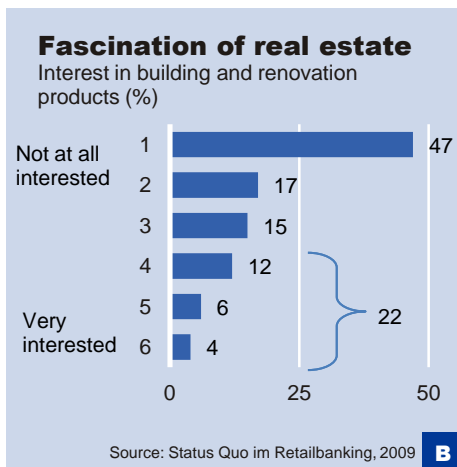
The highest reach is achieved by the private-sector banks, followed by the direct banks and the savings and cooperative banks (see chart 39). Since our clickstream analysis only includes page views from research sessions, financial institutions with a large proportion of research sessions relative to transaction sessions also achieve much higher reach. This situation explains some 30% of the variation in the market-share-weighted reach figures. The reach measurements we made thus reflect both the market share of the respective banks and institutional groupings as well as their presence on the internet as a source of information for customers and non-customers.

5. Interest centres on financial investments and loans

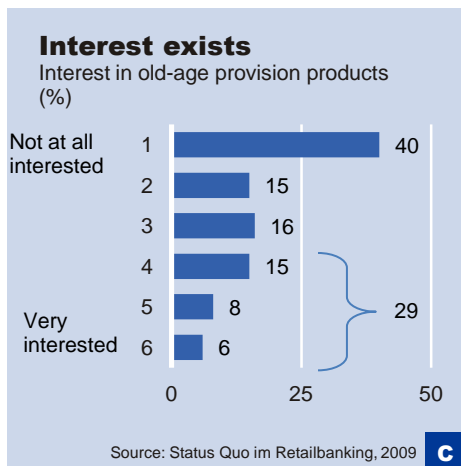
Webpages containing information on financial investments receive the most clicks. Investments are also the biggest single subject of search queries by internet users (see chart 35). Among the reasons for this are the more numerous new contracts signed in this segment, the popularity of online instant-access and fixed-term savings as well as the many clicks made to keep abreast of the prices of shares and other securities.

Taking new contracts into consideration puts the situation into perspective. Nearly 11% of all internet users per quarter visit sites dealing with home loans, although a total of just 1% of all customers signed a new home loan agreement in 2009 (see chart 38). Evidently there is a great need for information irrespective of or well in advance of the actual purchase of real estate. This need for information is not implausible: in a survey no less than 22% of bank customers said that they had a basic interest in products concerning construction and renovation (see chart B).⁶

The clickstream analysis reveals another special characteristic: only part of the previously visited webpages actually provide information about the subsequently purchased bank product. For instance, only 60% of the pages clicked by new borrowers contain information about credit and loans, 20% provide information about financial investments, and the remaining 20% on other topics (see chart 16). One part of this phenomenon is explained by the ambivalence of many web pages that have to be assigned to several categories. In addition, customers gather information about several products concurrently and there are many products that also belong together logically. Those who, for example, sign building society savings agreements as part of their individual old-age provision are interested in both alternative financial investments as well as financing. After all the savings-linked home loan (*Bausparkredit*) has to be supplemented later with other mortgage loans in order to finance the real estate purchase. For the financial institutions this opens up an avenue to provide additional information on related products and to suggest alternatives to customers.



⁶ Not all customers consider that visiting a product-related website should necessarily be regarded as conducting research. While according to our measurements for example 11% of internet users visit pages dealing with home loans during a single quarter, a survey conducted by Forrester Research Inc. found that just 3% of internet users do online research into this topic. This shows once again that customers understate their internet activities in surveys and confirms the special importance of our clickstream analysis. See Niemeyer, Vanessa (2010). How German Consumers Use The Net To Research And Buy Financial Products. Forrester Research Inc.



Customers procrastinate on old-age provision

6. Old-age provision is a particularly far-reaching topic

Pensions are an emotive issue. There is no other product or issue for which internet users submit more search queries. This impression tallies with the findings of other reports. For instance, 29% of all bank customers said in a survey that they were at least interested in principle in old-age provision products (see chart C). But this general interest is seldom converted into demand for concrete retirement products: only below-average numbers of users visit financial websites dealing with pensions (see chart 36). Overall they spend only 7 minutes per quarter researching on the corresponding webpages (see chart 34). Also, this interest is only awakened when an advanced age has been reached. In the 40-59 age cohort the reach for websites focusing on pensions occupies one of the top 3 places – but this is not the case for under-40s (see chart 42). Actually it would be wiser to think about pensions and old-age provision at a much earlier stage.

We believe there are two main reasons for the minimal importance of online research for old-age provision products, despite their key significance for individual financial planning and the basic interest in the topic: firstly, financial planning for old age is a particularly demanding task for which many aspects have to be considered at the same time (income development, family planning, taxes, risks, product mix, etc.). These subjects are too complex and wide-ranging for many users to carry out their research completely on their own. The result is on the one hand that they spend a long time avoiding the topic (the reason for the only tardy interest in pensions). On the other, many customers will probably prefer to receive individual advice at their branch. Secondly, the general interest in old-age provision can be satisfied by a variety of products. For example, the purchase of real estate (with a home loan) or an instant access savings account can also be regarded by customers as part of their old-age provision. Indeed our measurements showed that customers who acquire products for old-age provision or asset accumulation purposes carry out particularly intensive online research (see chart 28). Only in the case of specific retirement products (e.g. a pension plan) do we register fewer clicks. Some of this traffic, however, probably also leads straight to insurance companies, which are not the subject of our clickstream analysis.

Consequently, the job for the financial industry is to provide customers with better guidance through the jungle of retirement planning – via information that does not hide the complexity of the topic but makes it manageable. The internet is an important learning platform for this – along with the advice provided in branches – specifically because customers can proceed at their own pace.

7. One-third of online research processes include Google

Before signing a contract for a financial product 36% of customers who conduct an online research process make a financial search query on Google (see chart 18). Search engines essentially perform two functions: firstly they direct users to webpages that are new and correspond with their search queries. This occurs either via the natural search results or via appropriate advertising links. With simple products like instant access savings accounts it is enough for many customers to just glance at the list of results as it often already displays the key information (e.g. the interest rate on offer). Secondly, search engines also serve as navigation aids that many surfers utilise to reach sites that they already know. In the end it confirms the success of search engines that many users prefer to



Google search query indicates intensive research

use them rather than entering URLs straight into the browser or maintaining a list of bookmarks.

Overall, it turns out that the Google search indicates significantly more intensive research: during the online research process Google users visit almost twice as many webpages as users who don't use Google and they surf on more than twice as many different domains (see chart 25). In the course of an online research process users submit an average of 10.9 search queries, of which 3.7 queries are different (see chart 19).

Besides Google there are other independent sources of information about financial topics. These include information sites (e.g. financial news pages), comparison sites and financial portals. However, none of these pages reach as many internet users as Google. During the research process Google has the greatest reach of all independent sources of information (chart 17).

8. Brands serve as signposts

In the online world the brands of financial institutions and familiar sources of information serve as reference points for bank customers. For instance, far more internet users visit a financial website (64.6%) than make the corresponding search queries (20.1%). This means that many customers enter the URLs for the pages they require straight into the browser, use bookmarks or follow links from other sites.

The importance of brands as signposts and target addresses is also reflected in the type of terms used in financial search queries: in 73.1% of all search queries internet users utilise only brand names (e.g. "Deutsche Bank"). Nearly 25% use generic product categories (such as "fixed-term deposits"), the remainder are combinations of brands and products (see chart 23).

This high proportion of brand-specific searching suggests that customers navigate extensively via the search engine, i.e. customers use the search engine to access already familiar sources of information. The most likely to be chosen are the financial institutions with which customers already have a contractual relationship. On average around 14% of customers have a second current account at a different financial institution; 12% have a second savings account. Particularly large numbers of direct bank customers have several bank accounts – this is particularly rare among customers of the savings banks and cooperative banks (see box).

The number of bank accounts could also help to explain why the majority of customers surf on a maximum of two different financial domains prior to signing a contract (see chart 13). But other brands that are well known or attract attention thanks to advertising are also obvious conduits.

It is interesting to see the differences between the financial search queries of all internet users and of those who have actually purchased a new financial product. Customers who sign a new contract search more frequently for products or for a combination of product and brand but less often for brands only than the average internet user. Brands still receive the majority of search queries, but the lead over the products shrinks (see chart 23). This suggests that customers facing concrete financial decisions are more likely to shop around and do research beyond the brands and providers with which they are already familiar.

More than one bank

Number of accounts at different financial institutions

	Current accounts	Savings accounts
Citibank	1.2	1.2
Comdirect	1.7	1.8
Commerzbank	1.2	1.2
Deutsche Bank	1.2	1.2
HVB	1.3	1.1
INGDiba	2.0	1.9
Norisbank	1.2	1.3
Postbank	1.3	1.2
SEB Bank	1.4	1.4
Sparda Bank	1.3	1.2
Sparkasse	1.1	1.1
Volksbank	1.1	1.1

Source: Status quo in Retail Banking, 2009

9. Outlook: The future of the ROPO effect

It will be exciting to see how the ROPO effect develops in future. Three main factors need to be taken into consideration in this regard:

- **Greater scope for signing contracts:** over the next few years the scope for concluding contracts online will be much improved compared with the present. For example, the electronic identification card in Germany will enable a legally binding declaration of intent to be made. Financial institutions will become better at providing online access to the information required for signing a contract and where necessary supply support via additional measures (e.g. online advice tools, telephone advice, video tutorials, online forums). This should make people more willing to purchase a financial product online and thus boost the pure online channel.
- **Cohort effect:** the ROPO effect is currently most pronounced among the over-60 generation. This generation frequently prefers to sign contracts in person at the physical branch of their bank rather than giving a virtual signature on the internet. This reflects the fact that on average this cohort has less practice and less trust in using the internet. Moreover, it has a solid relationship with its bank – often with a trusted client advisor. Younger customers often use exclusively the online channel for research and purchase (see chart 30). The cohort effect will thus ensure that going forward the online channel continues to gain share at the expense of other channels. The ROPO segment is likely to gain custom mainly from the pure offline segment since the number of those who visit their branches without having done online research will continue to decline in future.
- **Need for advice:** the instant access savings and current account products that are currently popular in the online channel cannot on their own satisfy the requirements of comprehensive financial planning. An instant access savings account alone, for example, cannot form the basis of a sensible investment strategy. For comprehensive financial planning and with more complex products, however, many customers will be looking for individual and personal advice in future, too.

Overall, the online channel will gain additional market share thanks to the increasing degree of familiarity and the greater scope for concluding contracts. The ROPO segment will lose customers to the pure online channel, but it will also gain customers from the offline segment. Neither greater familiarity nor technology can, however, be substitutes for advice. For sophisticated financial planning many customers will probably continue to count on personal support from branch employees. This will bolster the ROPO segment, as it combines customers' self-directed research with the professional expertise of financial institutions. Fewer and fewer customers will thus continue to confine themselves to the offline world.

1.4 Conclusion

In this report we combine traditional consumer questionnaires with an innovative and expanded clickstream analysis that logs and evaluates the actual internet traffic of a large trial group. This enables us – for the first time – to measure and assess the importance of online research as a source of information on financial topics, especially prior to the signing of a contract.

**Online channel is of fundamental importance**

The findings underline the pivotal importance of the online channel for private clients. Over 60% of internet users visit websites dealing with financial topics; 20% submit search queries on financial issues. Prior to signing a new contract for a financial product also some 60% of internet users conduct online research. The reasons are obvious. Online, customers can study information at their leisure, compare conditions offered by competitors, read background reports and follow current developments. They can conduct self-directed, independent research. Few customers, for example, sign a home loan contract nowadays without first having compared interest rates online.

Nevertheless the branch is still the primary sales channel for the majority of the current new contracts. Many customers value the branch location for the personal service offered and the opportunity to validate their opinions during a consultation. However, just counting the number of contracts concluded online understates the role of the internet: 48.6% of all contracts are a combination of offline purchase preceded by an online research process. This figure is much higher than is typically determined in surveys and shows that many consumers themselves underestimate their levels of internet activity.

Search engines are the most important independent source of information. More than one-third of all customers who do research on the internet before signing a contract use Google. No other independent source of information has a greater reach. Google users also research more extensively: they visit more than twice as many domains as other surfers.

Brands serve as signposts

For their research most users surf directly on the websites of familiar financial institutions and other information providers. Most search queries also contain brand names. This shows that brands serve as guides also in the online world. Fears that the internet would undermine the established relationship between customer and financial institution are thus unfounded according to our analysis.⁷ All the same, we find that prior to actually signing contracts customers are more likely to shop around. They use search engines more frequently to conduct research into products and topics beyond familiar brands. Admittedly, brand names do then also remain in the majority.

Financial decisions are prepared well in advance

Customers use the internet to prepare financial decisions over the long run: the average online research process begins 7 ½ weeks before the actual contract signing – so it's not only the last click that counts. A continuous supply of helpful information can strengthen customer loyalty.

How will internet use in connection with financial services develop in future? There are several trends that can be observed. The share of online sales will continue to rise significantly. Supply-side factors that support this view are, for example, the increasingly convenient features for concluding contracts on the websites of financial institutions or the potential promised by electronic identification cards which will be available from around November 2010 in Germany. On the demand side the reservations about online purchases should subside further as users continue to gain internet

⁷ This assessment tallies with earlier findings: customers who use online banking would be more likely to purchase an additional product from their existing bank than other customers. See Meyer, Thomas (2006). Retail banking via internet: Banking online boosts and curbs customer loyalty. E-Banking Snapshot 19. DB Research. Frankfurt am Main.

experience. The cohort effect should ensure that the ROPO segment loses customers to the pure online channel and at the same time gains business from the offline channel. In addition, there are product-specific factors: with simple products the online channel will further build on its strengths because with such products customers can largely decide for themselves how they proceed. For complex financial planning, which in most cases consists of several products, many customers will most likely want to continue combining their own (online) research findings with professional advice. Expert advice – provided online, offline and combined – will thus remain a decisive instrument in building customer loyalty.

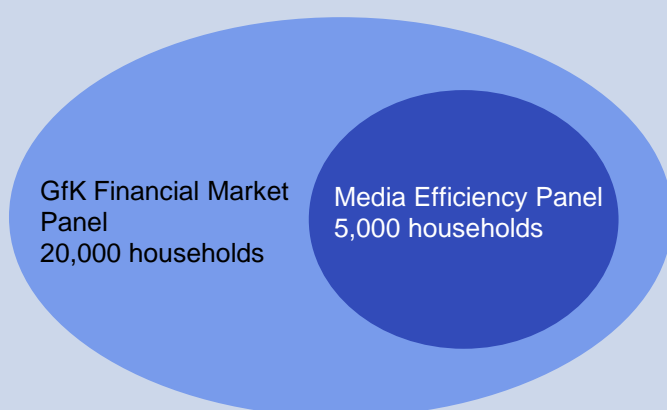
Thomas Meyer (+49 69 910-46830, thomas-d.meyer@db.com)



2. Chartbook: An overview of all findings

2.1 The clickstream analysis

Clickstream analysis covers 25% of Financial Market Panel



Source: GfK, Google, DB Research, 2010

1

Roughly 20,000 households report their purchases and contacts with financial institutions to the GfK in the framework of the Financial Market Panel (FMP). A subgroup of 5,000 households from this panel also participates in the Media Efficiency Panel (MEP). This is an innovative method of documenting the internet traffic of every user in a household, identifying the advertising displayed and recording all the search queries made by users (passive measurement of user behaviour). Participation in the Media Efficiency Panel is of course voluntary and transparent for users. Neither Google nor Deutsche Bank has access to the personal data or the individual surfing patterns of participants.

Every click, every search query is categorised

Examples

Brands

Financial institutions

Postbank
Berliner Sparkasse
Deutsche Bank
(...)

Bank groups

Private-sector banks
Savings banks
Mutual banks
Direct banks
(...)

Products / topics

Products

Instant access savings
Fixed-term deposit
Home loan
(...)

Master category / topics

Financial investment
Old-age provision
Pension
Financing
(...)

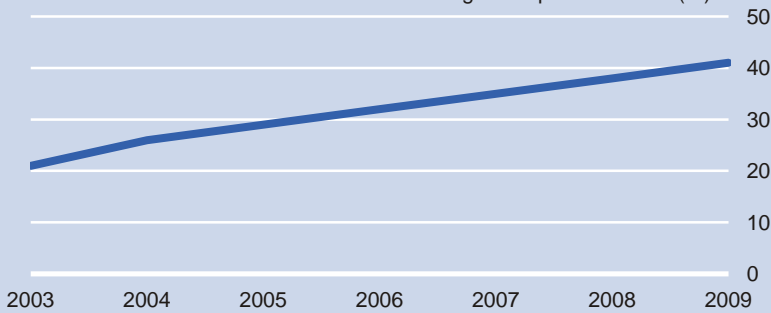
Source: GfK, Google, DB Research, 2010

2

All clicks and search queries are categorised according to certain brands, products or topics. This is facilitated by a catalogue of keywords that also contains typical search queries and misspellings. The taxonomy differentiates between the brands of financial institutions (e.g. "Deutsche Bank"), products (e.g. instant access savings) and topics (e.g. pensions). In addition, we form master categories for the bank groups (e.g. savings banks) and products or topics (e.g. financial investment). Every webpage and every search query can be assigned to several categories, so the reach of the subgroups does not necessarily add up to 100%.

Stable trend towards online banking

Share of Germans who have used online banking in the past 3 months (%)



Source: Eurostat, 2010

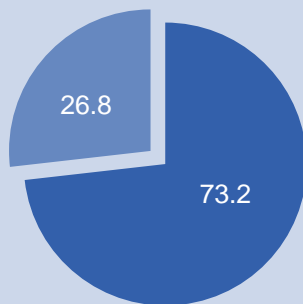
3

More than 25 million Germans use the internet to conduct their banking transactions, with the focus being mainly on simple transactions (checking account balances or transfers of funds). The trend towards online banking has been unbroken for many years and there is still no sign of its reaching saturation point. While only 41% of bank customers in Germany use online banking, the share in Scandinavia is over 70%.

Clickstream analysis only covers research

Share of page views by type of session (%)

Page views from research sessions (not encrypted)



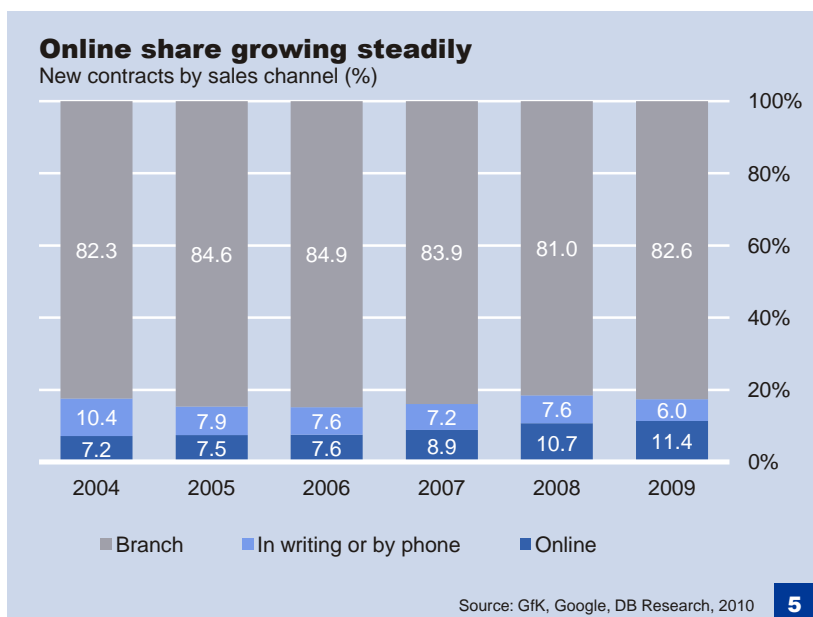
Page views from transaction sessions (encrypted pages)

Source: GfK, Google, DB Research, 2010

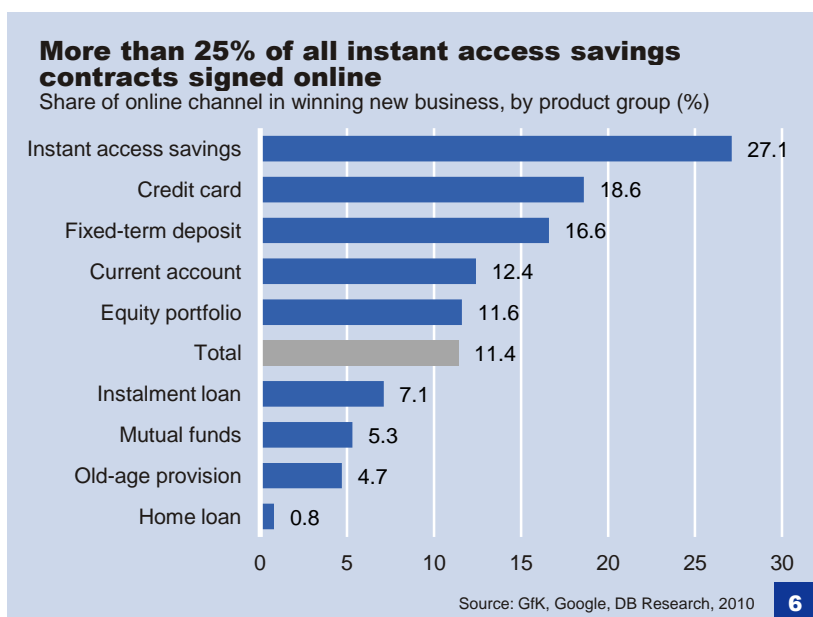
4

We are primarily interested in the research process, not the transaction channel. Those who conduct transactions online do not necessarily take heed of other information on financial topics. To differentiate real online research processes from transactions, only clicks on the unencrypted pages of bank websites are counted, since online banking in Germany is always conducted on encrypted pages.

2.2 The branch is currently still the primary sales channel



At present, branch outlets are still the most important channel for the sale of banking products. Yet, online sales have increased steadily over the past few years, reaching a share of 11.4% of new contracts in 2009. It should be noted that the online channel managed to gain market share even during the financial crisis since 2007. The big advantage of the branches is the level of advisory and personal service. Many customers also take advantage of personal contact in order to validate information they have gathered beforehand online. For certain products, e.g. opening an account for the first time, legal requirements also stipulate an identity check. This cannot currently yet be done completely online.



The online channel plays a major role in the case of simple and transparent products in particular. Instant access savings accounts and credit cards, especially, have a high share of online sales, for the related terms and conditions are easy to compare and the internet facilitates shopping around for the best offer. Complex topics such as old-age provision and home loans often require personal advice. While a large amount of research on home loans is also done on the internet, the contract is frequently signed at the branch.

2.3 Traffic on financial webpages by customers with new contracts

2.3.1 Intensive online research process precedes many purchases

Many customers do research online before they sign a contract at a branch outlet

ROPO effect:

Research online

Purchase offline

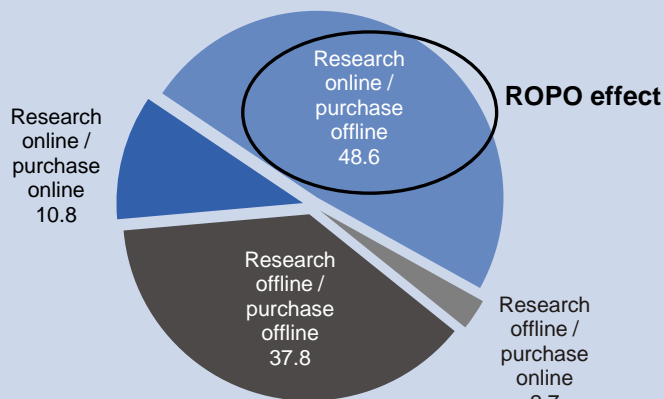


Source: GfK, Google, DB Research, 2010 **7**

The ROPO effect lends special significance to the online channel. We identify ROPO customers as clients who purchase their contract offline but who have previously gathered information about products, providers and conditions on the internet.

Online channel is of fundamental importance

Share of new contracts, by research and sales channel (%)

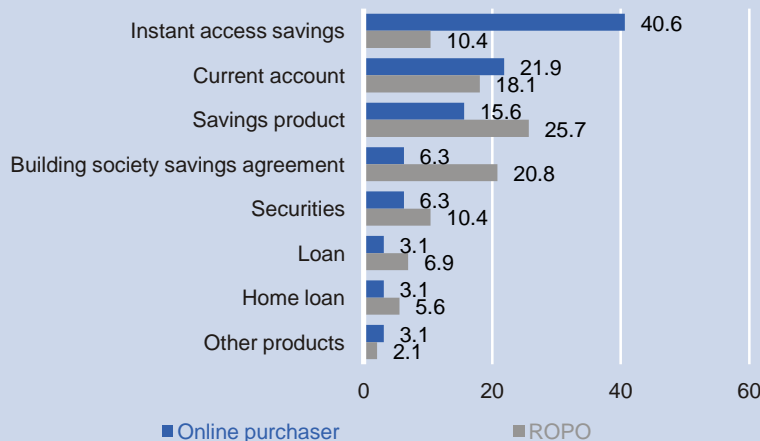


Source: GfK, Google, DB Research, 2010 **8**

In 60% of all new contract signings, customers have previously done research on financial topics online. However, the importance of the internet is often only acknowledged for the 11% of new contracts concluded via the online channel. The share of new contracts preceded by an online research process but concluded offline comes to 48.6%. Due to this ROPO effect, the significance of the online channel is underrated. Therefore, in the following we shall take account of all customers with new contracts that were preceded by an online research process, regardless of the sales channel.

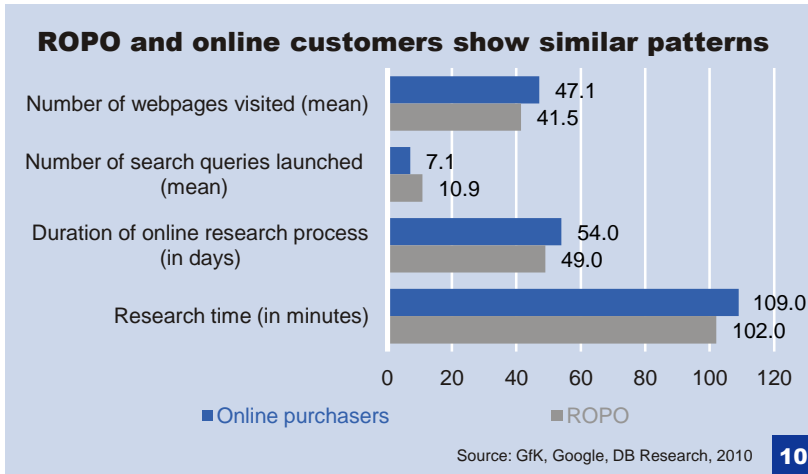
Instant access savings dominate online channel

Share of new contracts, by sales and research channel (%)

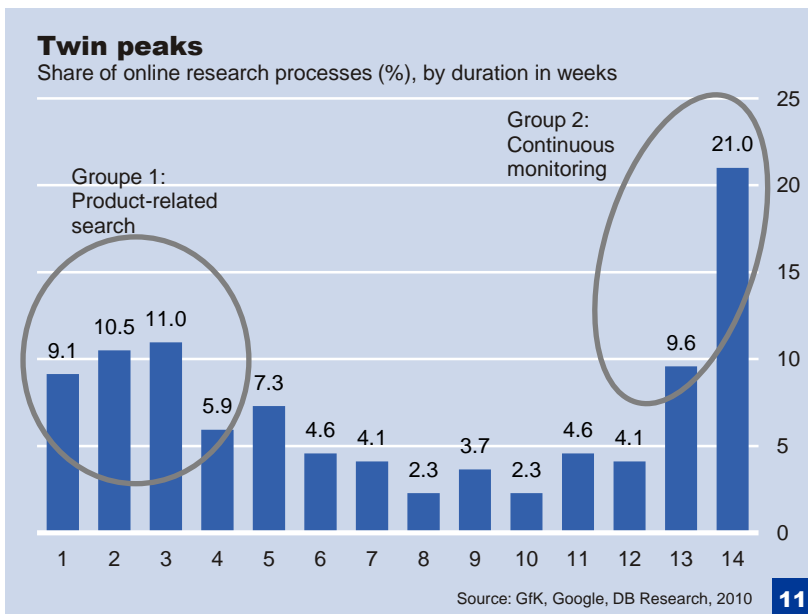


Source: GfK, Google, DB Research, 2010 **9**

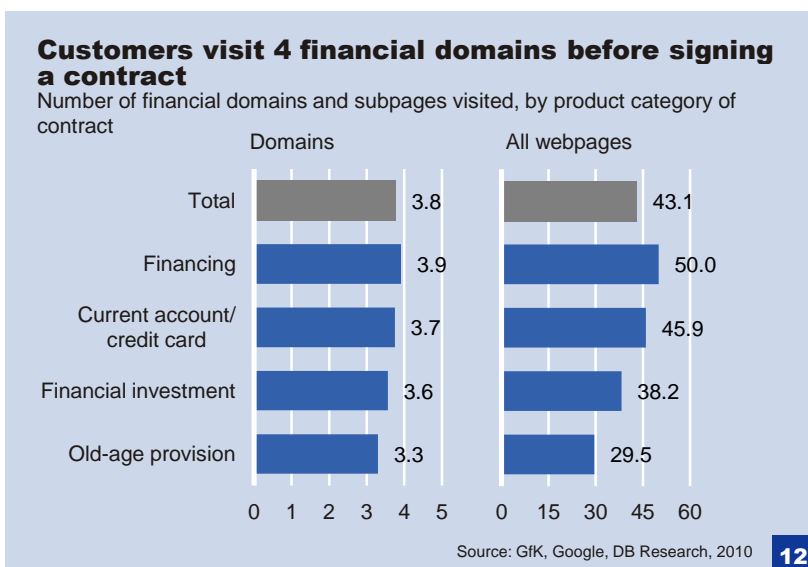
Taken together, in this section we will analyse 219 contracts that were preceded by an online research process. The choice of sales channel is shaped by customer preferences as well as demographic and product-specific characteristics. An above-average number of instant access savings accounts are opened via the online channel. By contrast, the ROPO effect is particularly pronounced in the case of building society savings agreements and other savings products.



Despite differing product preferences, internet use by ROPO and online customers follows similar patterns. Simply the number of search queries alone points to significant differences: ROPO customers launch 50% more search queries; at the same time, they visit a slightly smaller number of webpages.



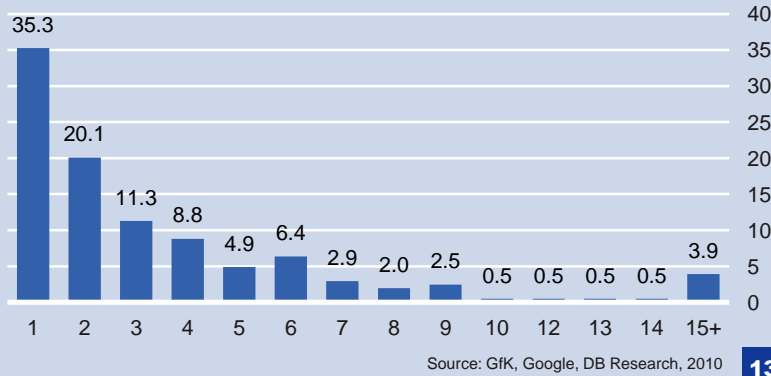
The duration of an online research process is the time between the first visit to a financial webpage or a corresponding search query and the signing of the contract. The process is regarded as having ended though if no financial research is carried out for 30 consecutive days (blackout). On average, an online research process lasts 7 1/2 weeks. But this process masks an interesting pattern: one group of customers begins its research activity relatively late, in most cases 2-3 weeks before signing. With another group, however, the research process takes 13 to 14 weeks or more. While the first group presumably focuses mainly on the product, the second group probably has an ongoing interest in financial issues.



Before signing a contract, customers visit 43.1 webpages on 3.8 different domains on average. It follows that the customers have clicked on over 11 pages per domain. These 11 clicks arise not only by surfing on the various subpages of a domain, but also by returning to the site on other occasions. It is interesting to note that there are scarcely any differences between the products – it is only that customers who have purchased an old-age provision product (e.g. a building society savings agreement or pension insurance) have hitherto surfed on considerably fewer financial webpages.

More than 50% of all customers visit a maximum of 2 domains online before signing

Share of online research processes, by number of domains visited before signing contract (%)

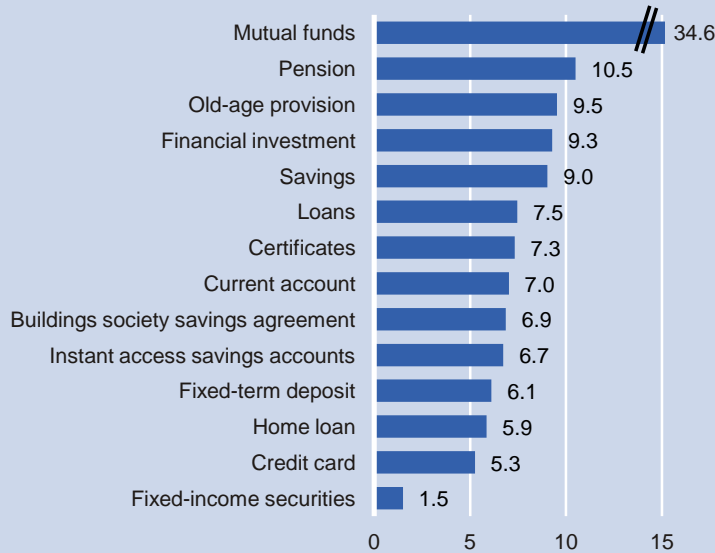


13

There is a skewed distribution pattern in online research processes – similar to, but not quite as pronounced as for reach statistics for financial topics (see 2.4.1). More than half of all research processes cover only two different domains. Many customers presumably first visit the webpages of banks with which they already have contractual or fiduciary relations.

Frequent visits to webpages on financial investments and pensions

Average number of webpages visited during online research process, by topic



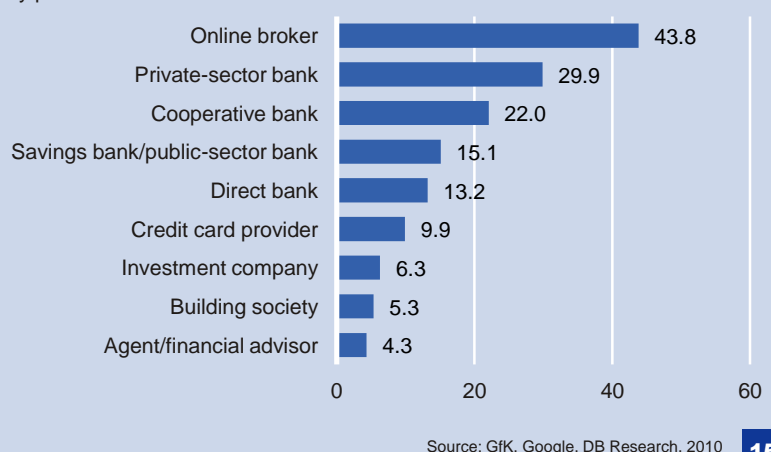
14

Webpages on financial investments and old-age provision are the ones visited most frequently before a contract is signed (regardless of the product). Mutual funds have a special status here, because permanent price monitoring drives up the number of clicks.

Note: In this case we count clicks going by the topic of the webpages, while in chart 12 we measure the number of clicks by the type of product purchased. Therefore, the numbers differ.

Price monitoring drives up number of clicks

Average number of webpages visited during online research process, by provider

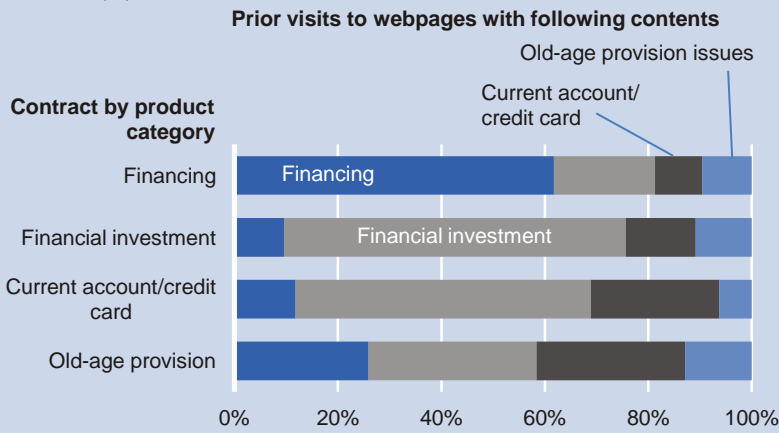


15

The special role of following stock quotes is confirmed by the many clicks on online brokers – even though they have a relatively small market share. Private-sector banks (including, for example, Deutsche Bank and Postbank but also some of the smaller private banks) rank in second place. Generally, the number of page views of a given provider follows his market share, online presence and the navigation depth of the website – i.e. the number of clicks on the page needed to reach the information sought.

Broad spectrum of customer interests before contract signing – cross selling opportunities?

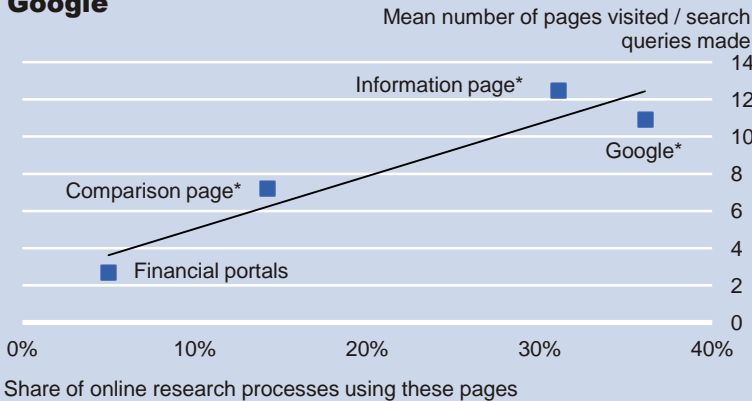
Share of visits to product-specific webpages, by product category of contract (%)



Source: GfK, Google, DB Research, 2010 **16**

The online research process before signing a contract is not confined to the corresponding product. While there is a majority of matching webpages for product sales in the area of financial investments and financing, customers also visit pages with information on other products. For customers who open a current account or apply for a credit card, research into financial investments carries the most weight. This could indicate a cross-selling opportunity. Topics pertaining to old-age provision attract comparatively stable interest regardless of the product ultimately purchased: they account for roughly 10% of all webpages visited.

Over 1/3 of online research processes include Google

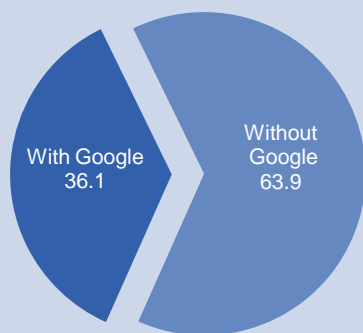


*Only financial topics / searches Source: GfK, Google, DB Research, 2010 **17**

Customers gather information not only directly from the providers of the financial products, but also to a considerable extent from independent sources such as financial information sites, comparison sites and search engines. The search engine Google has the greatest reach among customers with new contracts. Comparison sites are important above all for price-sensitive customers and before a loan agreement is signed. Except for people interested in building-society products, financial portals have the least significance.

Information and navigation before signing contracts

Share of online research processes with financial search on Google (%)

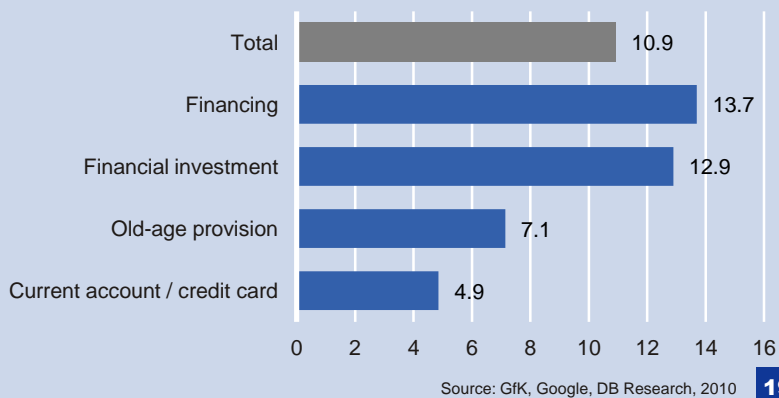


Source: GfK, Google, DB Research, 2010 **18**

Google is included in 36.1% of all online research processes. On average, users launch 10.9 financial queries per online research process. Note that the search engine serves both as a way to find still unknown webpages and as a navigation aid for pages that users are already familiar with.

More intensive searches before loan agreements

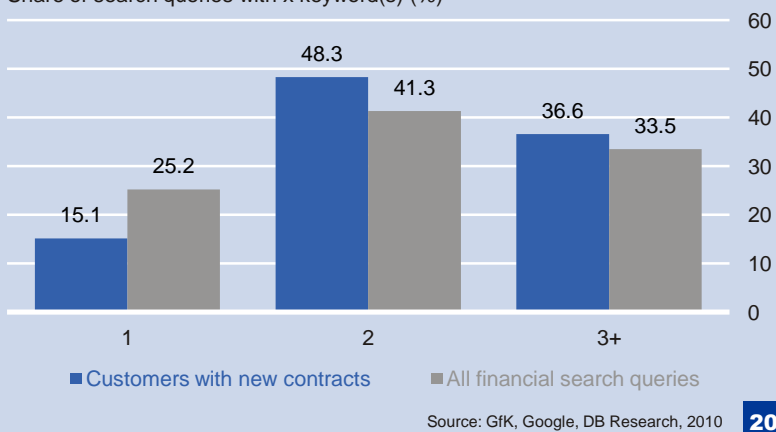
Number of financial search queries launched by customers on average, by product category of contract



Unlike with the clicks on webpages there are substantial differences in the number of search queries depending on the product purchased. Many customers search intensively for information on loans and financial investments online before signing a contract.

Customers love search queries with 2 keywords

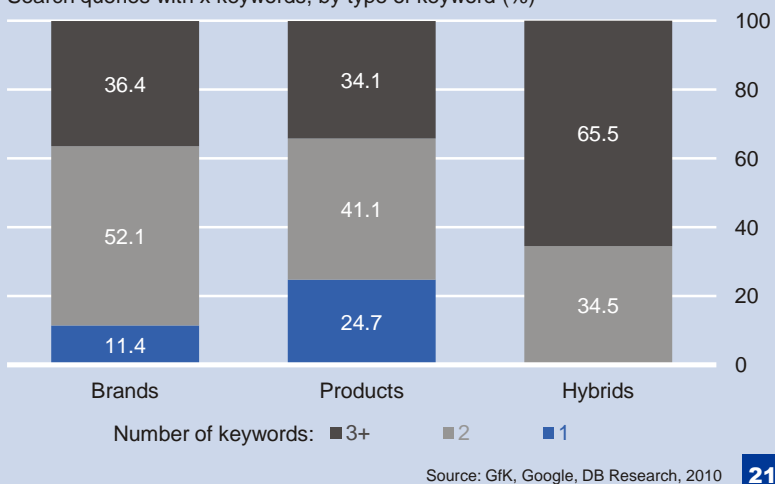
Share of search queries with x keyword(s) (%)



Most customers enter search queries consisting of two keywords. This combination is much more common for customers with new contracts than for general financial search queries. Often, customers list several keywords to increase precision – a popular two-word combination in German for credit cards, for example, is “Kreditkarte kostenlos”, or “free credit card”.

Brand names such as “Deutsche Bank”

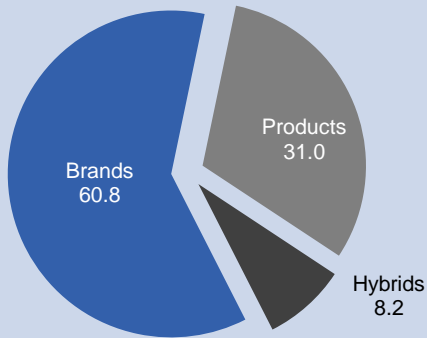
Search queries with x keywords, by type of keyword (%)



An additional reason for the many search queries with two keywords could be that many bank names in Germany consist of two parts (e.g. “Deutsche Bank” or “Berliner Sparkasse”). This is underpinned by the finding that, in the majority of cases, especially search queries using brand names contain two keywords. Search queries that mix brand names and products (hybrids) must, by definition, have at least two keywords.

Brands play an important role

Share of search queries by customer with new contracts, by type of keyword used (%)



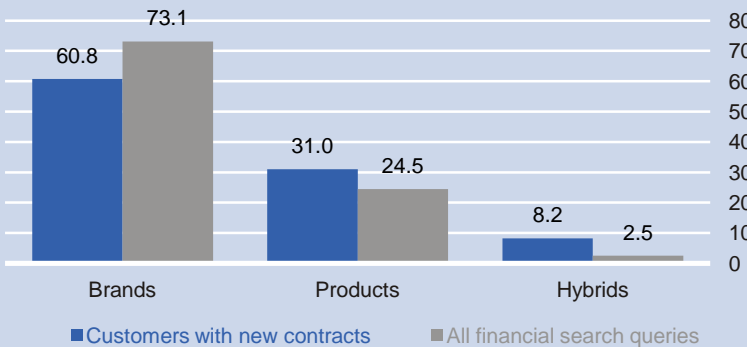
Source: GfK, Google, DB Research, 2010

22

In 60.8% of all financial search queries on Google, customers with new contracts use nothing but brand names (e.g. “Deutsche Bank”). Generic product designations (e.g. “fixed-term deposit”) account for 31% of search queries. Mixed forms (hybrids) play only a minor role. This shows that customers fall back on brand names they are familiar with also during the research process.

Before contract is signed: time taken to shop around

Share of search queries, by type of keyword used (%)



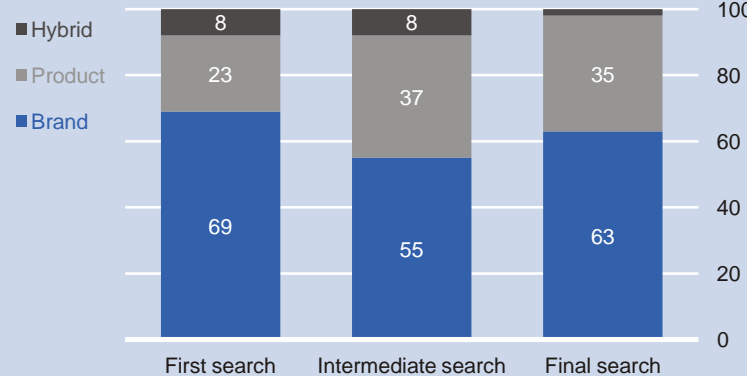
Source: GfK, Google, DB Research, 2010

23

Customers with new contracts look less often for brand names and more often for specific products than do internet users in general. This suggests that customers facing concrete financial decisions are more likely to shop around and gather information independently of the brands and providers they are already familiar with. Brand name keywords always remain, however, in the majority.

Search queries usually begin and end with brand names

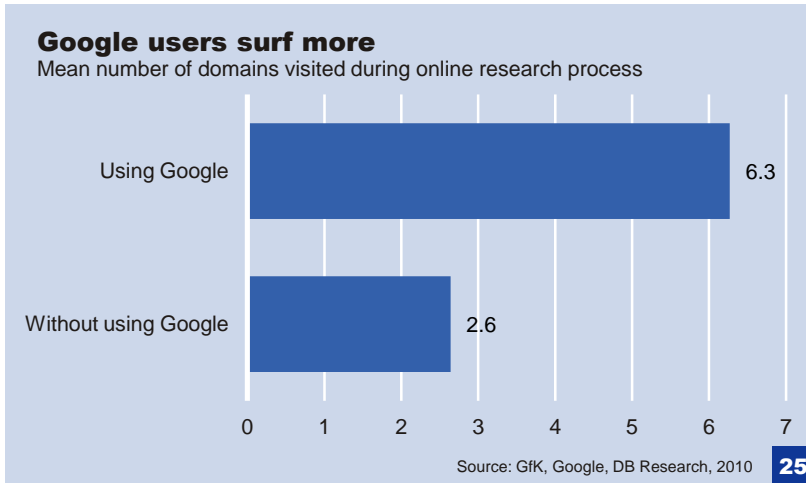
Share of search queries, by type of keyword and time of search process (%)



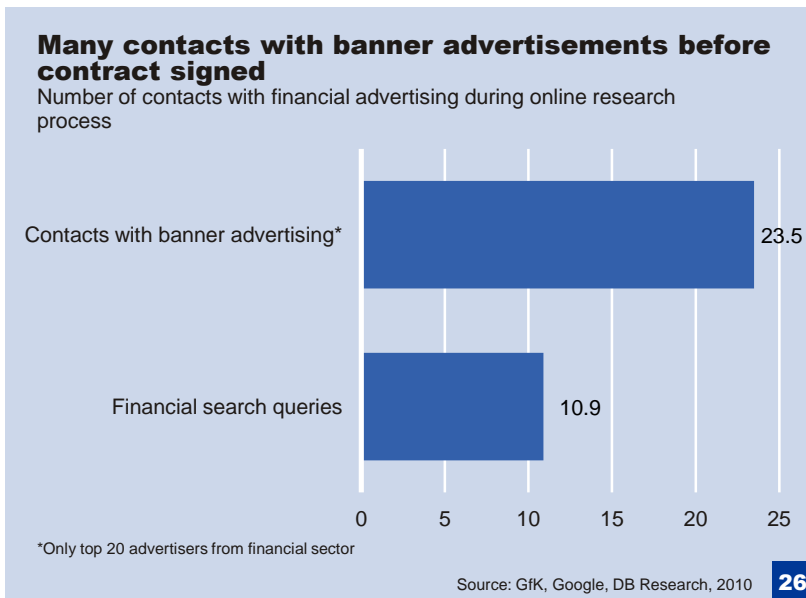
Source: GfK, Google, DB Research, 2010

24

A typical search process has certain underlying dynamics of its own. Customers usually begin with a search query containing brand-name keywords – possibly in order to obtain a benchmark from an already familiar provider. In subsequent searches, product-related terms gain importance, suggesting that the search is increasingly open and that the customer is potentially more willing to switch allegiances.



Customers who include Google in their online research process visit more than twice as many different domains (and nearly twice as many financial webpages) as customers who conduct their research without using Google. This shows that search engines not only fulfil their function as a navigation aid but also indicate broader financial research.

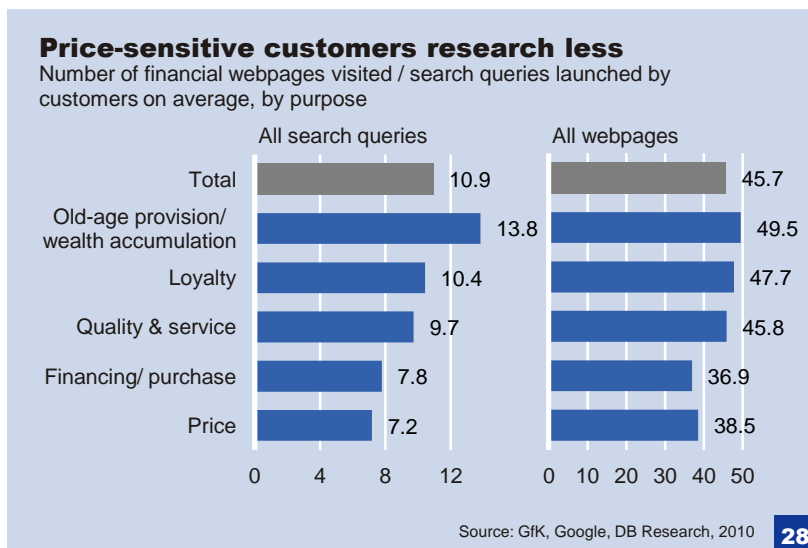


Providers may reach potential customers via different approaches: before signing a contract, customers have 23.5 contacts with banners of the top-20 advertisers from the financial sector. Moreover, on an average 10.9 financial search queries on Google they have contact with keyword advertisements.

2.3.2 ROPO channel is chosen more frequently by loyal, older and higher-income customers



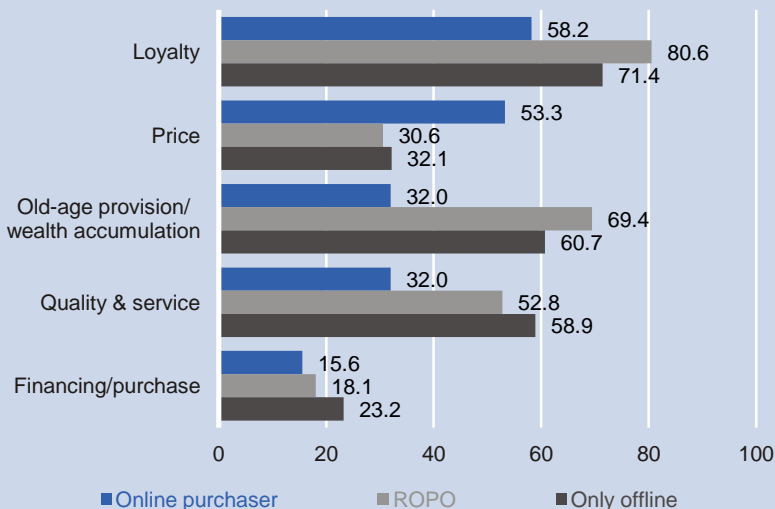
In the FMP framework, customers are asked to state for what purpose they purchased a particular product and why they settled on the provider chosen. Multiple responses are possible. As in chart 12, here we show the distribution of research processes in Group 1 (up to 3 weeks) and Group 2 (13 weeks or longer) depending on the purpose or motive. The differences are not very pronounced, but interesting. Loyal and quality-oriented customers account for the largest share of particularly long research processes. These customers form their opinion on the basis of constant monitoring – short-term campaigns are less important. With financing, by contrast, short and medium-term research processes are predominant (current conditions).



It is amazing that price-sensitive customers, on average, launch the fewest search queries before signing a contract and visit a below-average number of webpages. There are mainly two factors to explain this: first, price-sensitive customers typically have a clear idea of what they are looking for, e.g. the savings product with the highest interest rates, and can find it without multiple searches. Second, it is precisely with simple products that the search engine often delivers a results list already containing the desired information.

ROPO effect predominant with loyal customers and searches for old-age provision

Distribution of sales and research channels, by purpose of product / reason for choice of provider (%)



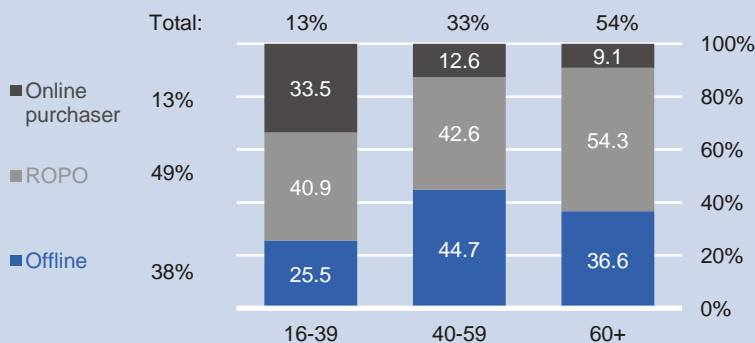
Source: GfK, Google, DB Research, 2010

29

The relative significance of the motives is also mirrored in the choice of sales and research channels. With price-oriented decisions, customers usually do their research online and also sign the product contract online (primarily instant access savings). By contrast, 80.6% of ROPO customers say that the relationship with their own bank (loyalty) is the key factor for them. Quality-oriented sales are transacted more frequently in a branch outlet, for many customers appreciate the advice and service offered there. However, many of them also do research online first (ROPO effect).

Online wave is building

Share of new contracts, by age and sales channel (%)



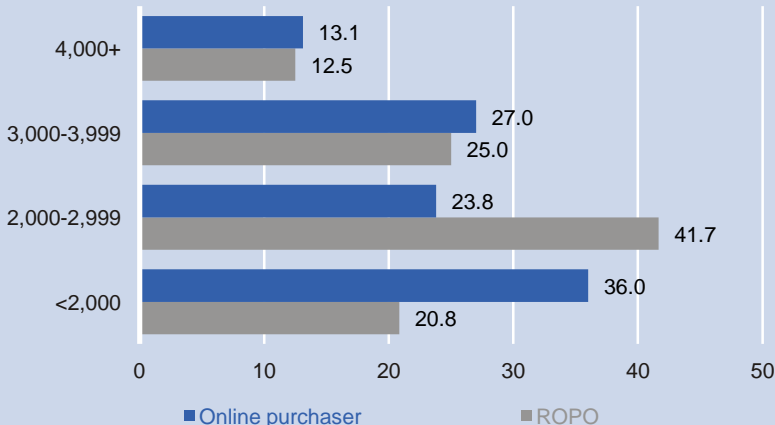
Source: GfK, Google, DB Research, 2010

30

The ROPO effect is clearly evident across all age cohorts. It is most pronounced in the 60-plus generation, which in turn is responsible for the majority of new contracts. Thus, the “silver surfers” are by no means afraid of online research – in fact, they are online more often than the middle-aged cohort. Online sales are most popular among the youngest age cohort. The cohort effect and the increasing degree to which online transactions are becoming a habit are likely to further underpin their acceptance.

ROPO: Majority of customers have (slightly) above-average income

Share of research processes, by net household income (%)



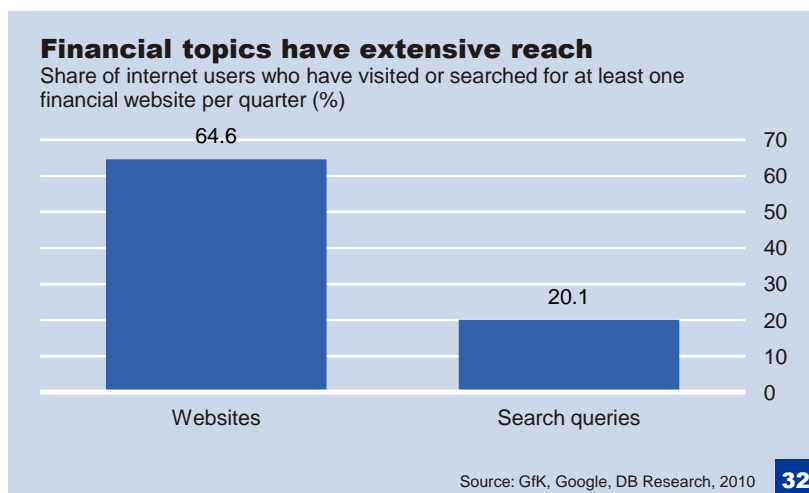
Source: GfK, Google, DB Research, 2010

31

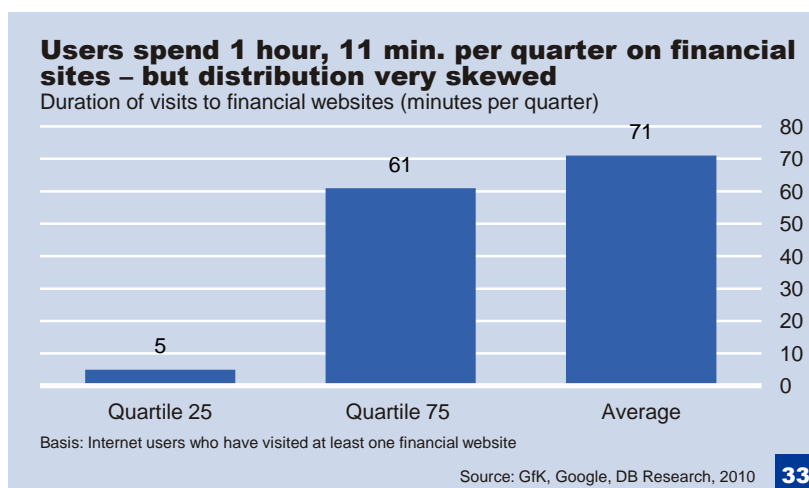
ROPO customers have higher incomes on average than online customers. This is due to the middle income segment: ROPO customers have an above-average presence in the cohort with a (monthly) income of EUR 2,000 to EUR 3,000. For incomes above EUR 3,000 there are only minor differences.

2.4 Financially related internet traffic of all internet users

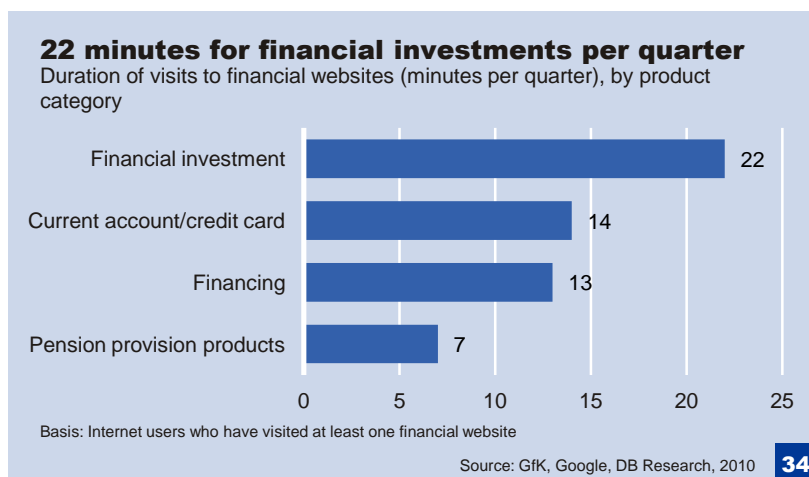
2.4.1 Extensive reach for financial topics on the internet



Financial topics enjoy an extensive reach in the online world. Over 60% of all internet users in Germany – i.e. 27 million people – visit at least one financial webpage (excluding transaction sessions) per quarter; over 20% (8 ½ million) make a financial search query on Google. Every visitor to financial webpages uses them for an average of one hour and 11 minutes per quarter.



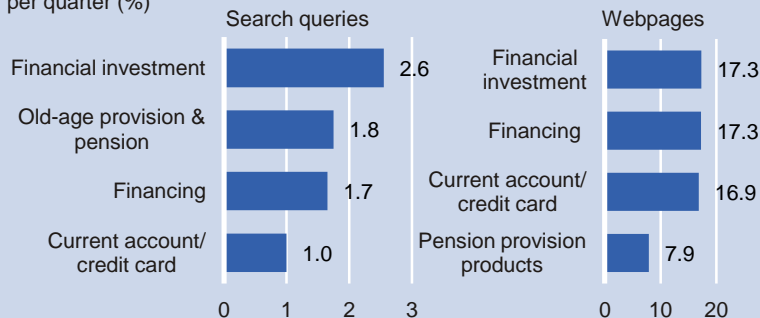
While many internet users call up webpages with financial topics, not all of them use the online channel intensively. This puts the extensive reach into better perspective. The lower quartile of users (bottom 25%) devotes less than 5 minutes per quarter to financial topics, the upper quartile (top 25%), by contrast, 61 minutes or more. The fact that the average value is higher than the quartile 75 value shows that especially the top 5-10% of users spend a particularly large amount of time on financial sites.



The longest periods of use are clocked on financial sites with information on financial investments. Users of online brokers, especially, spend particularly long periods online and do so particularly often.

Search target: Financial investments

Share of internet users who do research on particular products or topics per quarter (%)



Multiple classifications possible

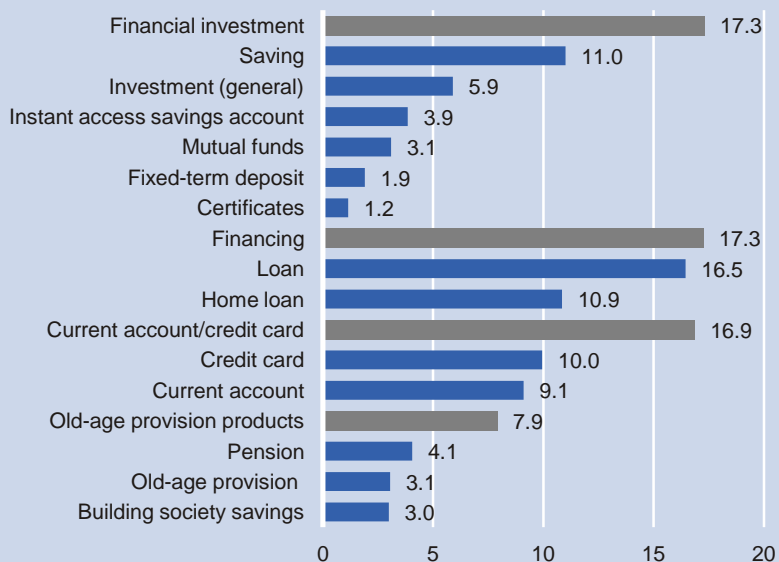
Source: GfK, Google, DB Research, 2010

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Financial investments are the main focus of search queries. They are followed by searches on the topics of old-age provision and pensions as well as financing. On the count of webpages visited there are fewer differences in terms of reach – only pages with old-age provision products are visited by fewer users. However, it has to be noted that financial investments and financing (e.g. real estate) are also a part of old-age provision. For this reason, the reach on old-age provision products may perhaps underestimate the amount of interest in this topic. Note: The basis here (reach for internet users) differs from the basis used in charts 12 and 19 (clicks per research process).

Saving and building

% of internet users who visit webpages with these products / topics per quarter



Multiple classifications are possible, so subcategories do not add up to 100%

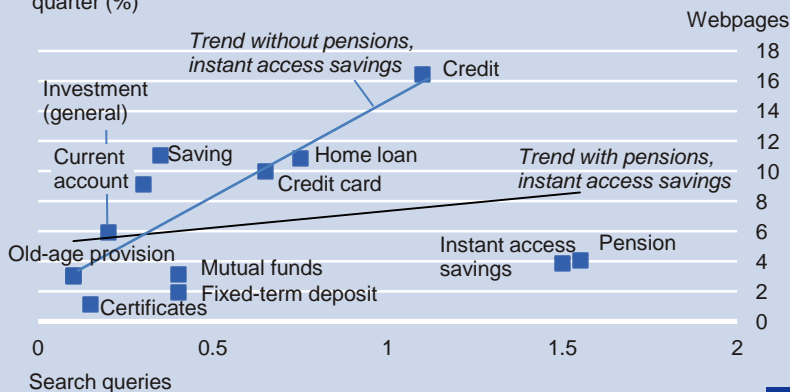
Source: GfK, Google, DB Research, 2010

36

If the webpages visited are classified according to individual products and topics, search queries on loans (instalment loans and home loans) as well as savings products rank in first place. Searches on financial investments are spread across various products (e.g. savings, fixed-term deposits) and general queries on financial investments (e.g. “highest return”), but none of them take top billing on their own.

Intensive searches for pension plans and instant access savings

Share of internet users who look for the following products / topics per quarter (%)



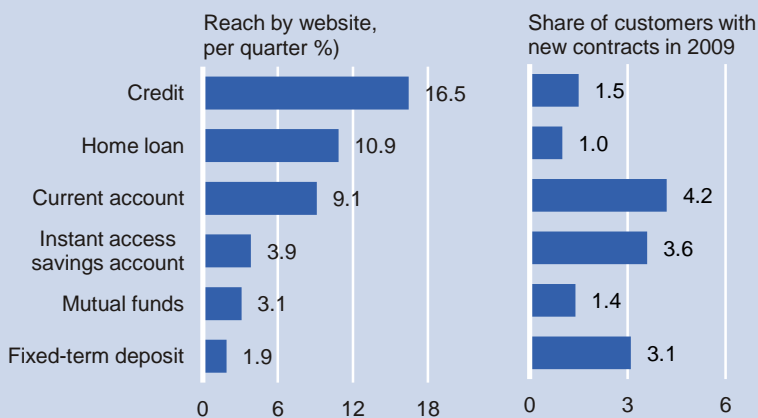
Source: GfK, Google, DB Research, 2010

37

There is a close correlation between the reach of financial search queries and the reach of webpages visited depending on the product or topic. However, this correlation only applies if the outliers “instant access savings” and “pensions” are ignored. In these two categories the reach of the search queries considerably outstrips the reading to be expected on the basis of the reach for webpages.

Reach on loans radically outstrips new contracts

Reach and market share by product (%)



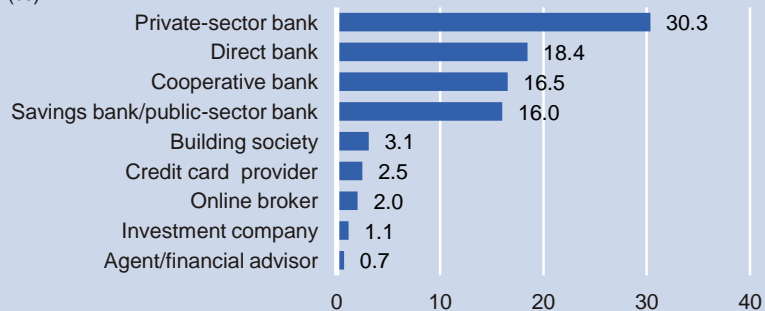
Source: GfK, Google, DB Research, 2010

38

For online research, the general interest taken in various banking products also plays a role. One indication of this can be seen, for example, in the new contracts concluded in the respective product categories. Exotic products are not purchased as often and are probably also not researched as often. However, it emerges that the correlation between reach and new contracts (online and offline) is by no means unambiguous. For instance, in 2009 merely 1% of all consumers signed a contract for a new home loan, even though 10.9% of the internet users visited sites with such information during the quarter.

Market share and online presence determine reach

Share of internet users who visit webpages of these providers per quarter (%)



Source: GfK, Google, DB Research, 2010

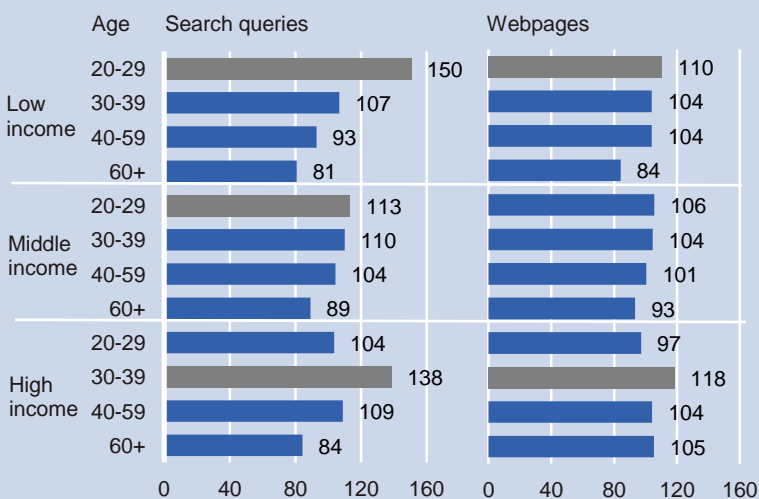
39

The reach of providers follows their market share and online presence. Most private-sector banks are strong on both counts. Direct banks usually have an even higher presence on the internet, but all in all a smaller market share. With savings banks, usually the reverse is true. As before, transaction sessions (i.e. visits with the purpose of online banking) were not taken into account.

2.4.2 Reach trends down, research intensity trends up in line with age

Reach declines with age

Share of internet users who search for financial products or topics per quarter (index all = 100)



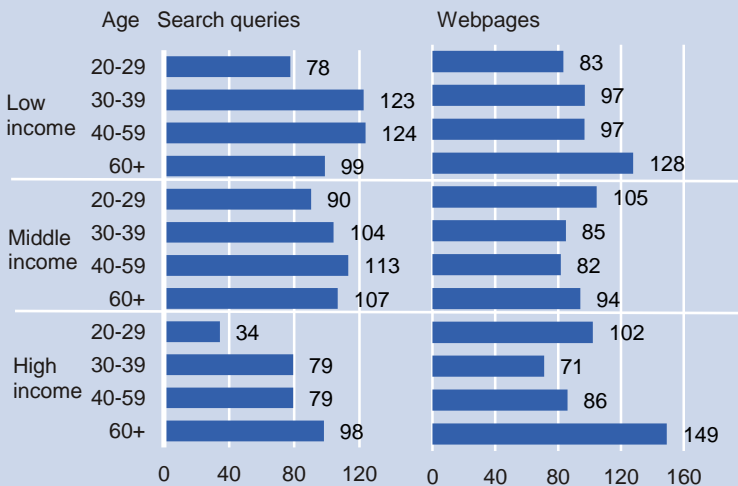
Source: GfK, Google, DB Research, 2010

40

Young, high-income consumers are the typical pioneers in the online world. In fact, the search engines' reach tends to decrease as user age increases. The same trend applies for webpages, but the differences are less pronounced. Note, though, that the different bases have to be taken into consideration: all in all, the reach for search queries is much smaller than for webpages visited. For this reason, the deviations on the search queries also seem bigger for statistical reasons, because the differences are related to a smaller basis.

Intensity of research tends to increase with age

Number of search queries / page views per user (index all = 100)



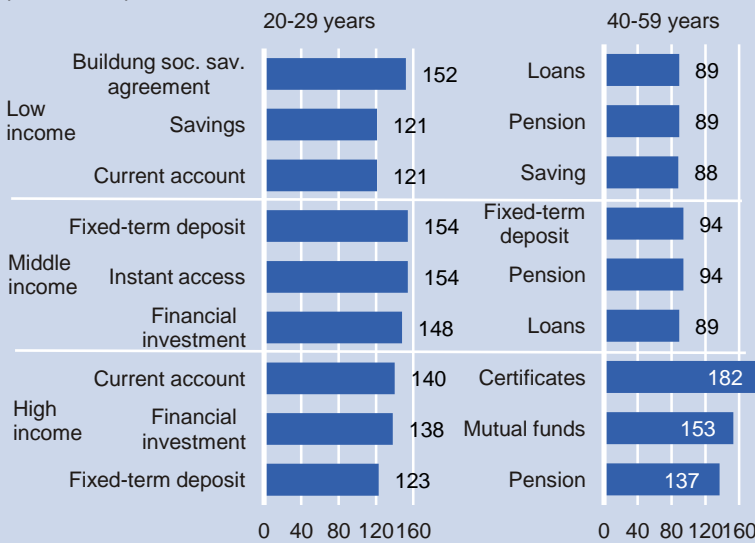
Source: GfK, Google, DB Research, 2010

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While reach trends down in line with age, intensity trends up. Older users calling up financial topics on the internet often start more search queries and visit more financial webpages than younger consumers. Several factors may explain this phenomenon: as people get older, the share of casual surfers decreases. This drives down the reach but increases the degree of intensity (a selection effect). Moreover, older users can gather and study the various offers and information with greater diligence, also having enough time to do so. However, it cannot be ruled out that the providers' user navigation may be more strongly geared to a younger target group and that older users may need more tries to be able to collect the information needed.

"Pension" sparks interest after 40

Number of internet users per quarter who visit pages with following products / topics



Source: GfK, Google, DB Research, 2010

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With financial topics, however, prior knowledge and the need for banking products also play an important role. While young consumers are in most cases very internet-savvy, they often have much less experience in the world of finance. Moreover, needs change depending on the phase of life they are in. Therefore, it comes as little surprise that from the age of 20 through 29 the main focus is on building up a relationship with one's bank (current account). In the low-income category (this age cohort includes many students who will later earn high incomes) one additional factor is a building society savings agreement. For the middle and high-income categories, financial investments are very important. The 40-59 age cohort zeroes in on the topic of pensions. For low and middle-income households, loans are a further topic of importance – customers with high incomes take interest in sophisticated investments such as certificates and mutual funds.

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