



Consumer Survey on Robo-Advice for Life Insurance

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Life & Health



SCOR
The Art & Science of Risk

Executive Summary

Robo-advice is a digital service that collects information from users and provides automated advice based on their requirements. Academic research in the robo-advice space has increased since 2017. As this new technology is developing increased numbers of applications in the financial services industry, further study is continuing to explore what drives trust with a robo-advice service¹. SCOR has undertaken a survey with a panel of U.S. consumers to provide insights on attitude towards robo-advice for life insurance.

More than 20% of respondents said they would use robo-advice for life insurance purchases in the future. Most respondents prefer to seek professional advice (44%) or carry out an independent search online (42%), but 10% identify robo-advice as their preferred advice source. Though a significant proportion of consumers show a preference for self-searching, overconfidence bias suggests that consumers may overestimate their own abilities and underestimate their need for advice. With the evolving online and direct-to-consumer channels, robo-advice has an important role to play in bringing advice to these channels to support self-searching. It has long been established that insurance distribution is a multi-channel approach, and the growing consumer appetite for robo-advice signals that it deserves a place in this network.

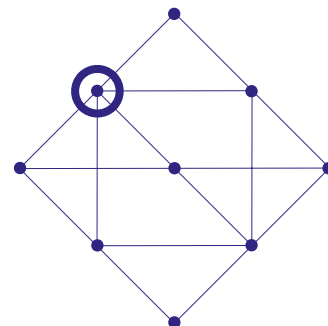
There is a clear variation by age, with younger consumers showing more interest in robo-advice and a more positive attitude to the service. Focusing only on the under 55 age group, 32% would use robo-advice when searching for life insurance in the future.

While there is significant variation by income group in the use of professional advice, willingness to use robo-advice in the future is similar across all income groups. Robo-advice is perceived as more accessible than professional advice and represents an opportunity to offer advice to lower-income groups that may perceive professional advice as too expensive. However, the same is not seen by education group, where those whose highest education level is high school remain hesitant about robo-advice. The target market for robo-advice is the middle education group with some

college or undergraduate degrees, as those with higher education or postgraduate qualifications still prefer a professional advisor.

The convenience of robo-advice is well recognized by consumers, and it is seen by 61% as offering support to self-searching for insurance products online. The ability to compare options and get unbiased recommendations is accepted as an advantage of robo-advice. There is hesitation about data confidentiality and the potential for algorithm errors to impact the quality of the recommendation. Also, some consumers don't trust robo-advice to answer their questions. The potential disadvantages create a hesitation towards this new technology which may be explained by regret aversion, i.e., worry about choosing the wrong option. Convenience is a key lever to mitigating this bias, because if trying out robo-advice is quick and easy, then there is nothing to lose.

As well as providing advice at the sale stage, a robo-advice service can also provide support to existing customers. This is already a feature of robo-advice for investments where the ongoing portfolio re-balancing is managed by the robo-advice service. Respondents showed a strong appetite for this type of ongoing review service for life insurance using robo-advice. When presented with the statement: It would be helpful if the robo-advice service could review my life insurance needs on an ongoing basis, 58% of respondents agree. Focusing only on the under 55 age group, 69% of respondents acknowledge the benefits of ongoing robo-advice review. Many consumers want annual or tailored reviews as their needs change. Overall, our study suggests that robo-advice has the potential to support insurers who need to provide an ongoing engagement service to existing customers.



Introduction

Robo-advice was introduced in the U.S. in the late 2000s amid the 2008 financial crisis. Since then, it has been growing in popularity around the world, with an accelerating pace of growth driven by the pandemic. While the adoption in China only began in 2015, according to the Kagan 2020 Consumer Insights survey, 38% of adult internet users in China are using robo-advisers². The market is growing for robo-advising as seen through increased adoption in the financial services industry but also increased attention in academia.

The SCOR Corporate Foundation for Science has a research chair with Toulouse School of Economics (TSE). Through this research partnership, we have been introduced to a study on robo-advice for small investors presented by Milo Bianchi at a TSE-SCOR workshop on Behavioral Insurance Economics in April 2021³. A field experiment was conducted to help understand the take-up of robo-advice and the interactions with the service for an employee savings plan with a large French asset manager⁴. The results of the field experiment show that robo-advice as an alternative to human advice can improve financial inclusion for lower-income groups. This investment study also shows consumer willingness to follow the advice over time even when it includes significant changes to the existing portfolio.

The study of robo-advice is of interest in the insurance space where the online channel has increased significantly since the pandemic and there is an advice gap in this direct-to-consumer channel. The ongoing connection with robo-advice is also of interest as part of increasing engagement with long-term insurance customers to review their needs over time. With the aim of understanding attitudes toward robo-advice for life insurance, we conducted a survey of U.S. consumers that investigates some of the themes documented by Bianchi and Briere (2021)⁵.

Survey methodology

This survey was carried out with a panel of U.S. consumers recruited by Toluna, a real-time consumer insights and research company. The survey was answered by 463 respondents from diverse demographic groups in September 2021.

All respondents are based in the U.S. with a spread by region representative of the population. There is an overweight towards females (63%) compared to the U.S. population (50.8%) and compared to the insured population where females tend to be under-represented. Most respondents are aged 35

to 74, which reflects the insured population. The proportion of retired respondents (25%) is higher than the U.S. population (14%) due to the age profile of the group.

Respondents cover a wide range of annual household income groups. Smoker prevalence among respondents (28%) is higher than the US population (12.5%) and the insured population where smokers tend to be under-represented. There is also a somewhat higher percentage of chronic disease sufferers compared to the U.S. population, but this may be explained by age, smoking and gender mix. Full details can be found in the Appendix.

The definitions used in the survey for robo-advice and the alternative approaches to researching and making financial decisions are set as follows:

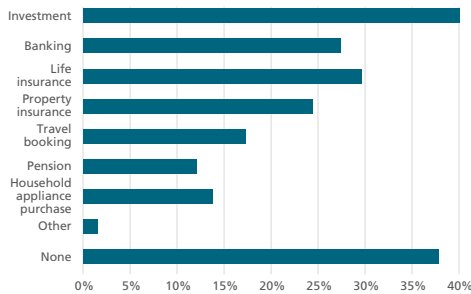
- Self-guided = read about all the options and make my own decision
- Robo-advice = answer some questions online and get an automated recommendation
- Professional advice = speak to an advisor live, either face-to-face or over the phone/video conference



1. Experience with professional advice

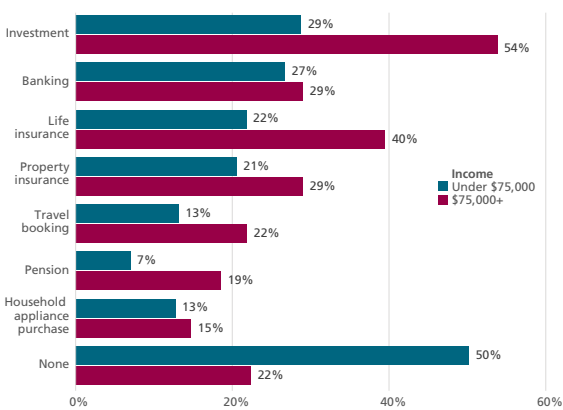
First, the survey asked respondents about their previous experience with various types of professional advice. Figure 1.1 shows that just under 30% of respondents have experience using professional advice for life insurance, while 40% have used professional advice for investments.

FIGURE 1.1 – HAVE YOU PREVIOUSLY CONSULTED A PROFESSIONAL ADVISOR FOR ANY OF THE FOLLOWING?



To gain further insights the responses are analyzed for various demographic subgroups. **The results show that the use of professional advice varies significantly by income group.** In lower-income groups, fewer respondents reported experience consulting a financial advisor compared to higher-income groups as shown in Figure 1.2.

FIGURE 1.2 – HAVE YOU PREVIOUSLY CONSULTED A PROFESSIONAL ADVISOR FOR ANY OF THE FOLLOWING?

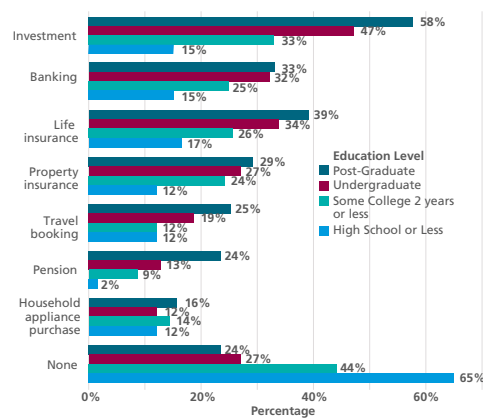


For life insurance, just under 30% of overall respondents had previously consulted a financial advisor (Figure 1.1). This percentage drops to 22% for income groups under \$75,000 compared to 40% for income groups \$75,000+ as shown in Figure 1.2. Note also that 50% of the under \$75,000 income group have not used professional advice for any

product or service, compared to just 22% for the over \$75,000 income group. **This highlights a gap in advice for lower-income groups.** This lower uptake of professional advice for lower-income groups may be driven by a perceived economic barrier in addition to actual economic barriers such as fees or minimum policy size. **Self-perception of social class** may prevent lower-income groups from seeking professional advice if it is viewed as a service for the wealthy.

A similar trend is seen by education level, as shown in Figure 1.3, where **higher education groups are more likely to have used professional advice** for all categories with significant differences highlighted for life insurance.

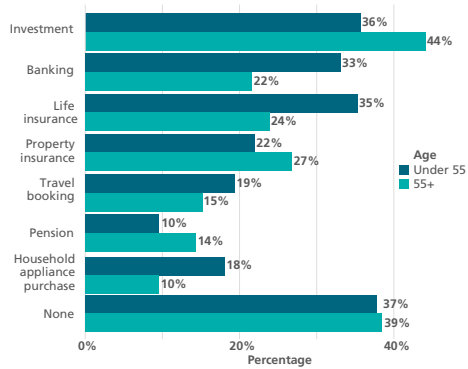
FIGURE 1.3 – HAVE YOU PREVIOUSLY CONSULTED A PROFESSIONAL ADVISOR FOR ANY OF THE FOLLOWING?



While 39% of those with post-graduate education have used professional advice when buying life insurance, the comparative figure is only 17% of those whose highest education level is high school or less. Among respondents whose highest education level is high school or less, 65% have not used professional advice for any service. **This highlights a gap for advice in lower education groups.** Similar to income group differences, this may be attributed to the affordability of professional advice or perceived suitability of the service for each social class. **Self-perception of social class** may act as a barrier to accessing professional advice, because lower education groups view this as a service for the well-educated or higher socio-economic groups.

Differences by age are also observed as shown in Figure 1.4 below.

FIGURE 1.4 – HAVE YOU PREVIOUSLY CONSULTED A PROFESSIONAL ADVISOR FOR ANY OF THE FOLLOWING?

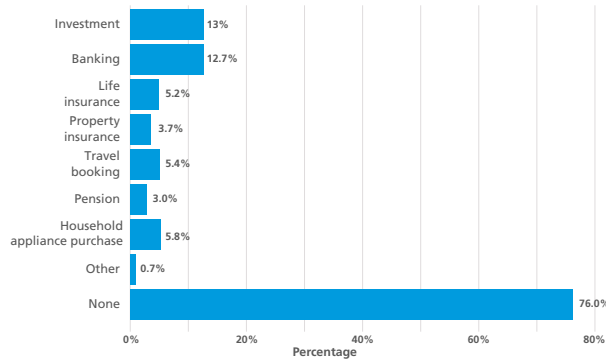


Younger respondents are more likely to have consulted an advisor for banking and life insurance while older respondents are more likely to have consulted professional advice for pensions and investment. This highlights different needs at different life stages.

2. Consumer sentiment on robo-advice

Next, the survey asked a similar question about the experience with robo-advice. Figure 2.1 shows that **fewer than one in four respondents have experience using a robo-advice service** with almost 76% stating they have not used robo-advice for any of the categories.

FIGURE 2.1 – HAVE YOU PREVIOUSLY USED A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?

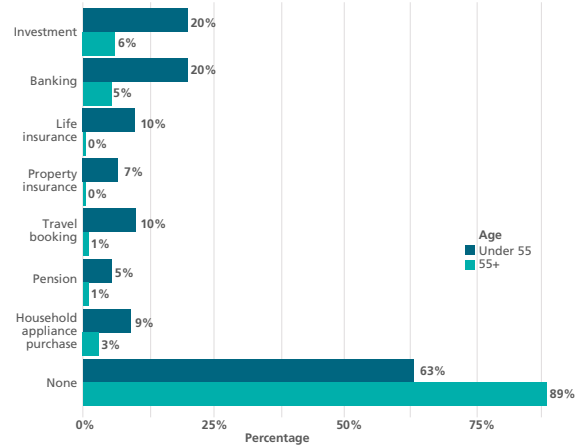


Among those that have previously used robo-advice, banking and investments are the most common with approximately 13% of respondents using a robo-advice service for each. Only 5% of respondents have used robo-advice for life insurance.

Subgroup analysis shows less variation between education or income groups as the percentage that have used robo-advice is low across all groups.

Variation by age is evident with most of the experience using robo-advice among the group under age 55. While 37% of those under 55 have used robo-advice for at least one of the categories, only 11% of respondents aged 55+ have used robo-advice.

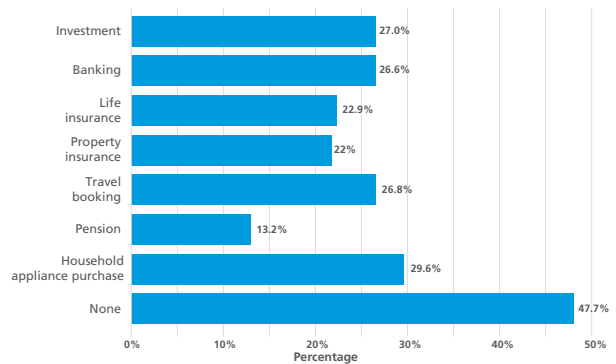
FIGURE 2.2 – HAVE YOU PREVIOUSLY USED A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?



This may arise because of a timing difference. For example, the age group over 55 would most likely have purchased life insurance many years ago, perhaps before a robo-advice service was available. It may also indicate differing attitudes to technology at different ages.

Since robo-advice is a relatively new service, the survey also asked whether respondents would be comfortable using a robo-advice service in the future. Results are shown in Figure 2.3

FIGURE 2.3 – IN THE FUTURE, WOULD YOU BE COMFORTABLE USING A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?



Robo-advice does not appeal to everyone, but it is encouraging that between **20-30% of respondents are positive about robo-advice usage in the future.**

Subgroup analysis shows that the biggest differentiating factor in terms of attitude to robo-advice is age.

FIGURE 2.4 – IN THE FUTURE, WOULD YOU BE COMFORTABLE USING A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?

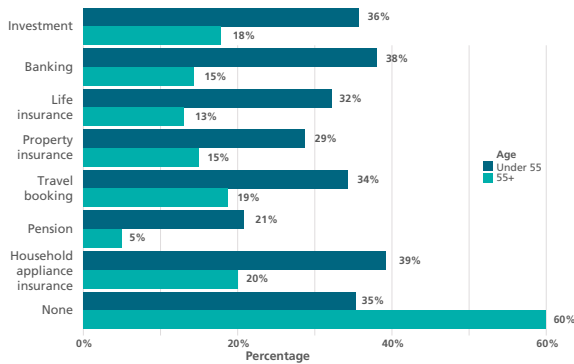
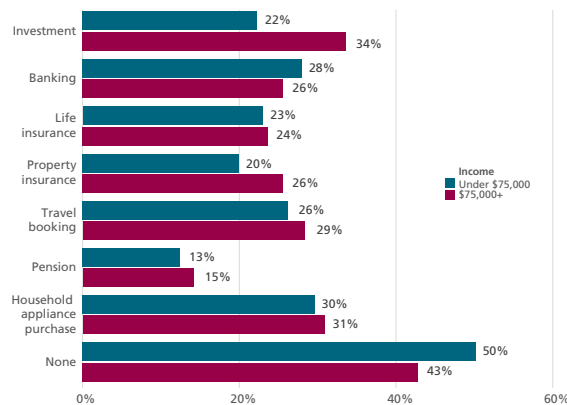


Figure 2.4 shows that 32% of respondents under age 55 would be comfortable using robo-advice for life insurance in the future compared to 13% for those over 55. A similar pattern is observed for banking and investments, where focusing on under 55, we find that 38% and 36% respectively would be comfortable using robo-advice for these services in the future. **There is a clear difference in attitude by age, and a robo-advice service will appeal more to the under 55 age group.**

On the other hand, no significant variation across income groups was observed in the responses to using robo-advice for life insurance as shown in Figure 2.5.

FIGURE 2.5 – IN THE FUTURE, WOULD YOU BE COMFORTABLE USING A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?

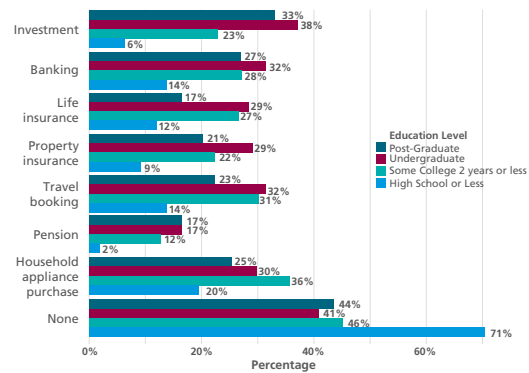


There is much less variation between income groups in terms of attitude to using robo-advice than seen in experience using professional advice (in figure

1.2). In response to the first question, 40% of the income group \$75,000+ had experience using professional advice for life insurance compared to 22% of the income group <\$75,000. When asked about the future, however, both income groups show a similar percentage willing to use robo-advice for life insurance (Figure 2.5). **This highlights the potential for robo-advice to reach lower-income groups that have not accessed professional advisory services in the past.** The perceived accessibility of robo-advice can help to overcome any barriers due to self-perception of social class that has limited access to professional advice for lower-income groups.

Attitudes toward robo-advice are varied by education level as shown in Figure 2.6.

FIGURE 2.6 – IN THE FUTURE, WOULD YOU BE COMFORTABLE USING A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?



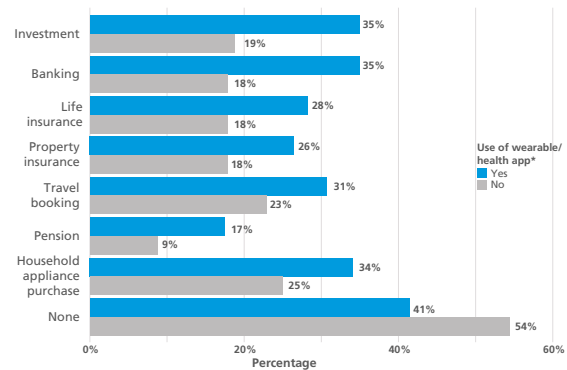
Those whose highest education level is high school or less show less interest in using robo-advice in the future. 71% will not use it for any service and only 12% would be willing to use robo-advice for life insurance. While robo-advice has the potential to close the gap in terms of affordability, it may be less effective at reaching lower education groups. There may be minimum levels of literacy or IT skills that would be barriers to accessing robo-advice for lower education groups. In addition, the self-perception of social class may lead to hesitation among lower education groups if they perceive that such a service would be too complex and suitable only for the well-educated or tech-savvy.

In the middle education groups, willingness to use robo-advice for life insurance is highest at 27% and

29% respectively for those with some college and undergraduate levels. While those in the highest education postgraduate group have an appetite to use robo-advice for investments, only 17% are willing to use robo-advice for life insurance. This highest education group still prefers professional advice for life insurance. This may be attributed to a **social class bias** where the higher education groups perceive robo-advice as a low-cost option suitable for lower socio-economic groups while they prefer to pay for the perceived premium service of professional advice. **This creates a very specific target market, with robo-advice showing potential to serve the middle market.**

Attitudes toward technology are also correlated with attitudes toward robo-advice. The survey panel was previously asked about ownership of wearable technology to monitor their health and well-being*. Those owning a health wearable or app are more eager to use robo-advice in the future as shown in Figure 2.7.

FIGURE 2.7 – IN THE FUTURE, WOULD YOU BE COMFORTABLE USING A ROBO-ADVICE SERVICE FOR ANY OF THE FOLLOWING?



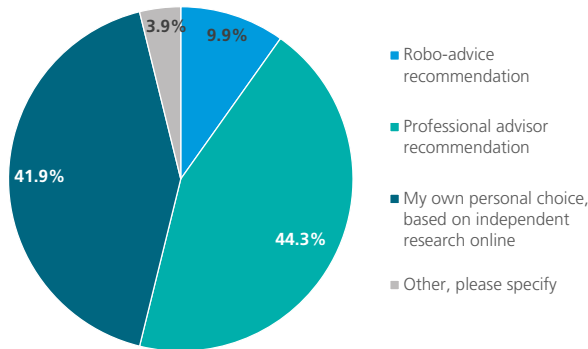
* Do you have a wearable device, digital at-home medical monitoring device or use a health app on your smartphone?

Attitude towards technology is an important indicator. A higher percentage of respondents who are using technology to track their health indicated comfort with using robo-advice in the future to buy life insurance.

3. Multi-channel dynamics

Comparing robo-advice to other approaches, the survey asked respondents to choose which life insurance advisory service they would trust most. Figure 3.1 shows that around 10% choose robo-advice.

FIGURE 3.1 – WHEN BUYING LIFE INSURANCE, WHICH WOULD YOU TRUST THE MOST?



The majority (86%) are divided between professional advice (44%) and making their own personal choice based on independent research (42%). A similar message comes through in ReMark’s 2021/22 Global Consumer Survey⁶ which shows the power of people even in the time of increasing digitization. A multi-channel approach to selling life insurance is needed as different distribution channels work for different people.

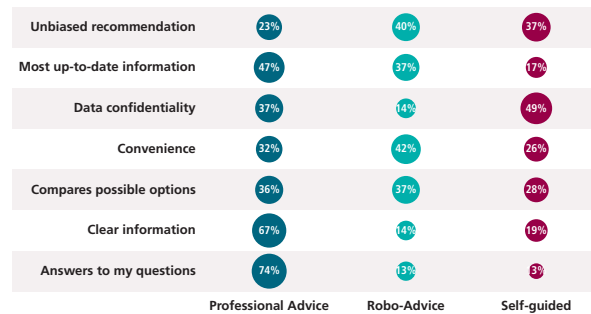
Selected by 1 in 10 as their most trusted channel, robo-advice has a place in this multi-channel network. The majority of those that answered ‘Other’ shared a preference for using a combination of two or all three of the approaches.

Robo-advice could also play a supporting role in helping consumers to reach a decision. A significant proportion of consumers have a preference for self-searching (42%), but **overconfidence bias** suggests that consumers may overestimate their own abilities and underestimate their need for advice. An experiment on insurance demand with multiple distribution channels conducted by Mouminoux et. al. (2018)⁷ found that when searching for insurance using multiple channels, only 44% of participants chose the optimal contract from the available alternatives and that the probability of making a sub-optimal choice increased with the number of

alternatives uncovered. This is explained by the concept of **obfuscation** where too much choice leads to inefficient decisions due to confusion. If designed to support self-searching, robo-advice could relieve some of the cognitive strain by narrowing down the search to the most suitable options for a consumer. The **illusion of control bias**, the tendency for people to overestimate their ability to control events, may be at play for those that prefer to make their own decision, and therefore framing robo-advice as a support rather than a replacement could improve the take-up among those that exhibit a preference for self-searching.

To get a more in-depth understanding of consumer preferences, the respondents were asked to choose which of the advice sources they would rate higher on specific criteria. The results are shown in Figure 3.2.

FIGURE 3.2 – ADVICE SOURCE RATING ON SPECIFIC CRITERIA



When it comes to receiving the most up-to-date information, getting clear information and answering specific client questions, professional advice seems to be the preferred method. The main advantages of using robo-advice come through in the receiving of an **unbiased recommendation**, the **convenience** of the service and allowing for a **comparison across possible options**. **Data confidentiality is still a weakness** of both professional advice and robo-advice, with respondents preferring the self-guided method when it comes to managing personal data.

Next, some advantages and disadvantages of robo-advice compared to other approaches were presented in the form of statements that respondents were asked to rank on a five-point agree/disagree scale. In Figure 3.3 (see below), each statement that presented an advantage of robo-advice is shown in a stacked bar chart, with five sub-bars representing how much the respondents agreed or disagreed with the statement.

From these answers, we can conclude that the accessibility of robo-advice is a key advantage of choosing to use this method. **Convenience** is an attractive feature of robo-advice. 61% of respondents also agree that robo-advice can be quicker than self-search online (statement 4). **This highlights the potential for robo-advice to support those who prefer to make their own personal choice.**

A broader perspective is also acknowledged by 50% as an advantage of robo-advice (statement 6). There is a greater agreement with the statement

that **robo-advice is not biased by commission earnings** (statement 2) than not biased by advisor preferences (statement 1). Consumers may identify the potential for the algorithm behind the robo-advice to be based on professional advice and so pick up the inherent preferences or to be designed by insurance companies to promote their preferred products. This raises important **ethical considerations** in designing a robo-advice service to ensure that recommendations are not biased by the input data or objectives out of line with consumers' best interests.

The strongest disagreement is related to sharing data where 48% do not prefer to share data with a robo-advice service instead of a professional advisor. Data confidentiality is a key pain point for consumers and a potential barrier to take up if not addressed.

The statements that presented the potential disadvantages of robo-advice compared to other approaches are presented in Figure 3.4 (see below) in a similar format.

FIGURE 3.3 – ADVANTAGES

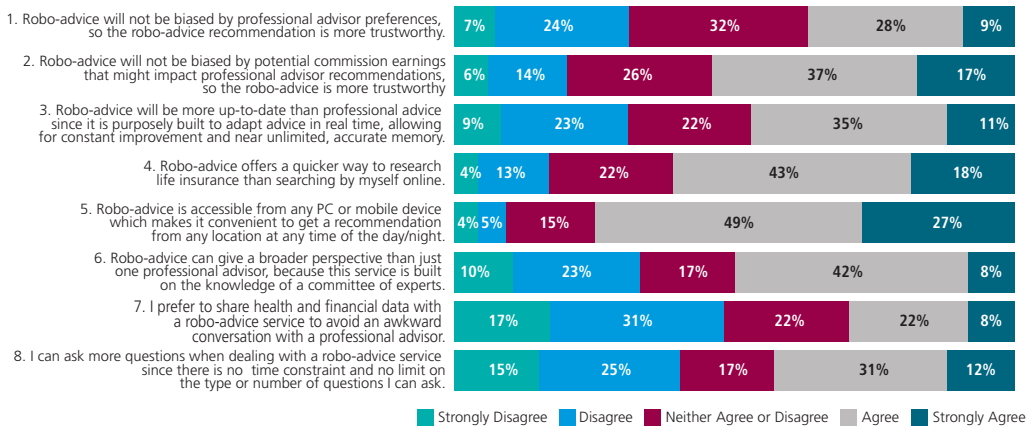
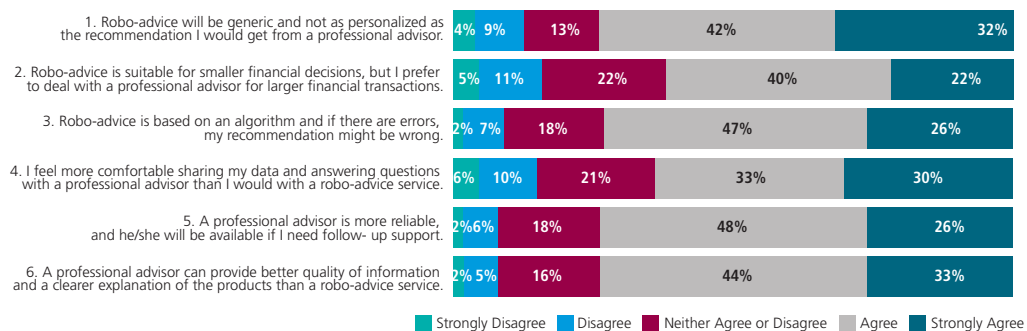


FIGURE 3.4 – DISADVANTAGES



There is strong agreement with the statement that a professional advisor is more reliable, where personalized follow-up support is available if needed (statement 5). There seems to be hesitation coming from the possibility that there may be algorithm errors with the robo-advice which may impact the quality of the recommendations given (statement 3). **This highlights that consumer confidence in the service would be easily damaged if problems emerged with the quality of the service.**

Comparing Figure 3.3 and Figure 3.4, there seems to be more agreement with the disadvantage statements compared to the advantage statements. Since robo-advice has not yet been tried by most of the respondents, these will have been considered as potential advantages and disadvantages.

While many respondents acknowledge the potential for advantages, most are wary of potential disadvantages. This may be attributed to **regret aversion** where consumers will be worried about trying something new in case it is the wrong option. Because of this bias, it is easier to visualize the disadvantages than the advantages. The well-recognized advantage of the convenience of robo-advice is a key lever to mitigating the regret aversion bias, because if trying out robo-advice is quick and easy, then there is nothing to lose.

As this new technology becomes more widespread, the key to building trust with consumers is to ensure that potential disadvantages are managed and minimized, and advantages are highlighted and felt by users.

4. Ongoing robo-advice support

As well as providing advice at the sale stage, a robo-advice service can also provide support to existing customers. The survey asked about this robo-advice support service in the context of reviewing life insurance needs on an ongoing basis. The **response was positive**, with 58% agreeing that it would be helpful if robo-advice could review their life insurance needs on an ongoing basis as shown in Figure 4.1.

FIGURE 4.1 – IT WOULD BE HELPFUL IF THE ROBO-ADVICE SERVICE COULD REVIEW MY LIFE INSURANCE NEEDS ON AN ONGOING BASIS.

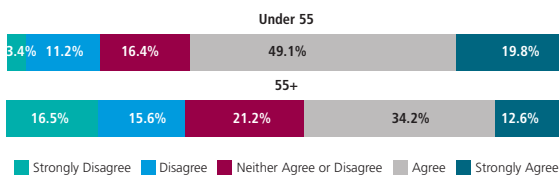


In fact, even more respondents are interested in robo-advice as a service to review insurance needs on an ongoing basis than were interested in the service at the initial sale stage. This appetite for a follow-up service highlights an interest from customers in ongoing reviews.

Present bias is the tendency to prefer something now than a better offer for later, and this makes it difficult for consumers to think about their future selves. As a result, insurance products are usually purchased with a consumer's current circumstances in mind rather than a long-term view. The survey response tells us that customers have recognized a need to review their insurance cover over time. Since life insurance is a long-term product, review over time can help counteract the impact of present bias by updating insurance cover at various points in time allowing consumers to only focus on their needs now and adapt later.

There is variation by age in attitude to ongoing review, with more agreement among the under 55 age group and more disagreement among the over 55 age group as shown in Figure 4.2.

FIGURE 4.2 – IT WOULD BE HELPFUL IF THE ROBO-ADVICE SERVICE COULD REVIEW MY LIFE INSURANCE NEEDS ON AN ONGOING BASIS.



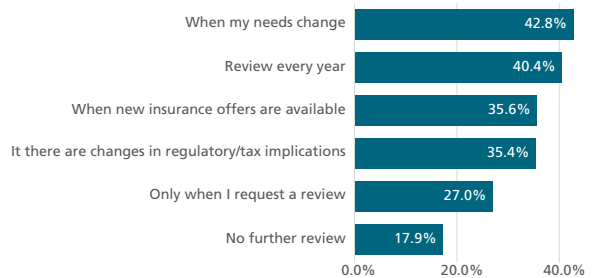
Combining the agree and strongly agree categories, in total 69% of the under 55 age group agree that ongoing support from a robo-advice service would be helpful. **This highlights an especially strong appetite for ongoing engagement among younger age groups.**

Some variation by health status is also observed. A slightly higher percentage of smokers agree or strongly agree (65%) compared to non-smokers (55%). Smokers may be keen to review terms if they change smoking habits and/or reduce other risk factors that could improve their terms. Lapses tend to be higher for smokers, and engagement with these policyholders could improve persistency.

Those with no medical conditions are more likely to agree that ongoing review is helpful, with 66% answering agree or strongly agree. Still, 59% of those reporting 1 or 2 medical conditions and 45% of those reporting 3 or more medical conditions agree or strongly agree that ongoing review would be helpful. This may suggest some anti-selection where healthy policyholders are more likely to engage in the ongoing review. **Overall, a significant proportion of policyholders are interested in review over time irrespective of health status.**

The survey also asked about the frequency of follow-up that customers would be interested in, and the responses are summarized in Figure 4.3.

FIGURE 4.3 – WHEN WOULD YOU LIKE THE ROBO-ADVICE SERVICE TO REVIEW YOUR LIFE INSURANCE NEEDS?



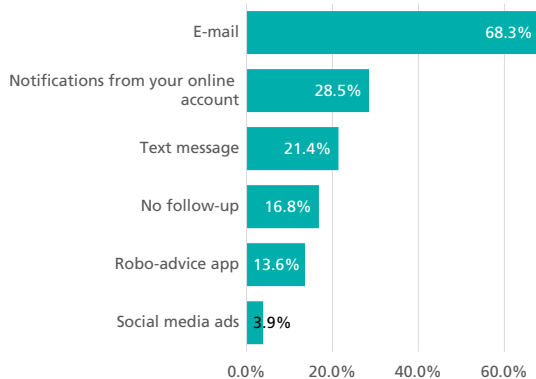
Over 40% would be interested in an annual review. Reviews triggered by personal circumstance changes, insurance product changes and regulatory changes are all popular. 27% would like to decide the frequency of review and request based on their needs. Only 18% request no further review, which highlights that **82% of respondents would like**

support to review their insurance needs over time.

Life insurance is a long-term product and traditionally there has been little contact with customers after the initial sale unless there is a claim. Insurers have been trying to engage more with existing customers, and here we see again a strong appetite for some follow-up. Robo-advice may be an efficient way to offer this type of support to customers to ensure their insurance remains relevant over time.

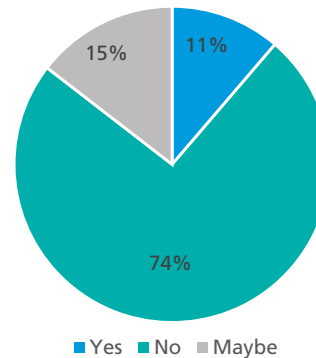
The survey also asked about types of communication or follow-up services. Figure 4.4 shows that e-mail is the most popular communication method.

FIGURE 4.4 – HOW WOULD YOU LIKE TO BE CONTACTED BY THE ROBO-ADVICE SERVICE TO REVIEW YOUR LIFE INSURANCE NEEDS OVER TIME?



Looking across sub-groups, e-mail is the preferred contact approach across age groups, income groups and education groups. Text message is much more acceptable to those under 55 (35%) compared to those over 55 (7%). Similarly, contact through a robo-advice app appeals to 20% of those under 55 but only 8% of the over 55 group. Social media was the least popular choice for follow-up contact. The survey also asked specifically about linking robo-advice to social media and the responses are shown in Figure 4.5.

FIGURE 4.5 – WOULD YOU LINK THE ROBO-ADVICE SERVICE TO YOUR SOCIAL MEDIA SO NEW INSURANCE PRODUCTS COULD BE SUGGESTED, WHEN SOMETHING CHANGES IN YOUR LIFE THAT COULD IMPACT YOUR NEEDS?



Most people would not be comfortable with this idea, with 74% saying No. However, it does appeal to some people, with 26% signalling a clear Yes or a to-be-convinced Maybe. When split by age groups, 17% of the under age 55 group answered Yes compared to 5% in the over 55 age group. There is a clear pattern by age, highlighting that links to social media are more acceptable for younger target audiences.

Designing a robo-advice service

This survey provides key insights on attitudes toward robo-advice that can be applied to design a service that fits with consumer needs. Firstly, **the target market has been identified** as the younger age groups (under 55), lower-income groups and middle education groups. Robo-advice appeals more to those who have already adopted new technology such as wearable health apps.

Two separate designs will be needed to fulfill the demand for **robo-advice at the sales stage** to support the online channel and with **existing customers for ongoing engagement**.

At the sales stage, the **robo-advice should fit with the existing multi-channel infrastructure** and seek to support those who are self-searching online. It will need to be positioned as a complement rather than a replacement to other channels/sources of information to build trust and manage regret aversion towards this new technology.

The preference for self-searching online is driven by the illusion of control bias which creates a desire to be in control of our own decisions. **Robo-advice to support our own decisions** is therefore far more acceptable. Self-searching online is also susceptible to overconfidence bias where consumers overestimate their own abilities and underestimate their need for advice. Robo-advice as a support to educate and help narrow down the options to avoid choice overload has the potential to help consumers avoid these pitfalls when self-searching online.

Ongoing engagement design needs to target existing customers. While there is a high level of interest in the service across all sub-groups, the survey helps to identify the sub-groups that will be most open to this type of ongoing contact. This could identify a good target market to begin to test the service before rolling it out more broadly. While there was consensus that e-mail is the preferred method of communication, the preferred frequency of communication is more varied. The service will need to cater for optional annual reviews and more specific targeted reviews based on company triggers such as new products or based on customer triggers such as life events. **A flexible**

service design is key to successful engagement with a wide spectrum of customers.

There is also an opportunity to link robo-advice as a point-of-sale service with robo-advice for ongoing review. Robo-advice appeals specifically to younger age groups, lower-income groups and middle education groups. This is a group that has a lower tendency to take out insurance and therefore may represent a new target market. This allows **robo-advice to play a role in tackling the protection gap**. New products may need to be developed to ensure low-cost options are available to meet the needs of this target market. The ongoing review service will be a complement to this low-cost product which can represent a starter product until customers can afford or need a more significant cover. For example, younger customers may have a limited number of dependents when in their 20s but later need increased cover when they buy a house, get married and/or start a family.

The key to encouraging adoption is to make it easy. Convenience is the most well-acknowledged advantage of robo-advice. In addition, making it easy to access and use the service is a key lever to increasing motivation to try this new technology. **Use of social norms to highlight when people like to use robo-advice** may also be helpful when introducing this as a new service. Using the results from this survey, it is possible to highlight when a consumer's peers showed interest in using robo-advice.

The survey highlights the need to build trust in robo-advice. Robustness of the technology, user-friendliness of interface and data confidentiality protocols are all key to developing a robo-advice service that consumers can trust. The survey highlighted a concern among consumers about algorithmic errors. If these arise it could damage the reputation of the service and impede take-up for future iterations.

Since convenience is a key advantage, the service needs to be easy to use. **A positive experience will build intrinsic trust among consumers.** Transparency will also build trust. When consumers understand why a recommendation has been made, they are educated as well as advised and can feel empowered to make their own decision

and retain a sense of control. This needs to be balanced with information overload which would return to the state of cognitive load that self-searching can generate.

Data confidentiality is a key concern and appropriate governance is required to ensure there are no data breach or discrimination issues that could lead to reputation damage. Data confidentiality measures and data protection policies should also be highlighted to consumers to address concerns highlighted in the survey.

The survey does not tell us that a robo-advisor is preferred to a human. Robo-advice is preferred when it is viewed as a cheaper or quicker alternative to professional advice. Therefore, consumers won't want to lose the human touch. By applying the principles of behavioral science, the communications through the robo-advice experience can be presented in a way that real people can associate with and still feel the human touch. Robo-advice can help overcome the behavioral biases that impact insurance decisions, but it will only achieve these aims if **designed with a behavioral lens.**

Conclusion

Our first-of-a-kind consumer survey on using robo-advice for life insurance revealed very interesting findings. The results offer a signal that there is a growing appetite for robo-advice and highlight that it has a place in the multi-channel insurance distribution landscape. Attitudes toward robo-advice for life insurance vary by certain demographic factors, especially age, income and education level. Younger age groups are the most likely to accept and use robo-advice. There is evidence of interest across all income groups highlighting the potential for a robo-advice service to reach lower-income groups that previously did not access professional advice.

One of the key findings of this survey is that consumers are interested in using robo-advice for life insurance not only for a policy purchase but also to review ongoing insurance needs. It shows that robo-advice offers great potential for serving evolving consumer needs in the coming years, potentially even better than conventional channels. At SCOR, we are eager to continue our exploration of the applications of robo-advice to the life insurance customer journey and would love to discuss further with you.

About the author

As Head of Behavioral Science for SCOR's global research function, the Knowledge Team, Aisling Bradfield focuses on improving our understanding of policyholder behavior and applying behavioral economics research to gain insights into customer interaction with insurance at all points of the customer journey. Aisling graduated from University College Dublin, receiving a bachelor's degree in Actuarial and Financial Studies. She is a Fellow of the Society of Actuaries in Ireland and qualified as an actuary in 2014. Aisling completed an executive education course in behavioral economics at London School of Economics.

Appendix

Demographic data

463 respondents answered the survey carried out in September 2021. All respondents are based in the U.S. with a spread by region that is representative of the population. The group is 63% females and 37% males. This represents an overweight towards females (63%) compared to the U.S. population (50.8%). Women are less likely than men to own life insurance⁸. Females represent a lower proportion of the insured population but are a target group to reduce the protection gap.

The majority of respondents are between ages 35 to 74, which reflects the current insured population. The average age is 54, and there is a spread across age groups with 35–74-year-olds well represented.

Age group	Total 100% (463)	
LESS THAN 18	0%	0
18-24	0.22%	1
25-34	6.70%	31
35-44	21.60%	100
45-54	21.60%	100
55-64	26.13%	121
65-74	20.09%	93
75-80	3.67%	17
MORE THAN 80	0%	0

40% of respondents are in full time employment and 25% are retired.

Current Employment Status	Total 100% (463)	
Employed full time	39.96%	185
Employed part time	9.07%	42
Self-employed	6.91%	32
Not employed but looking for work	4.10%	19
Not employed and not looking for work	2.59%	12
Retired	24.62%	114
Student	0.86%	4
Homemaker	9.29%	43
Other, please specify	2.59%	12

The proportion of retired respondents (25%) is higher than the U.S. population (14%) due to the age profile of the group where approximately 50% of respondents are over age 55.

Respondents have varying levels of annual household income representing a wide range of income groups.

Annual Household Income	Total Respondents 100% (463)		U.S. population ⁹
Under \$25,000	11.88%	55	18.1%
\$25,000–\$49,999	20.73%	96	19.7%
\$50,000–\$74,999	19.87%	92	16.5%
\$75,000–\$99,999	20.30%	94	12.2%
\$100,000–\$149,999	16.85%	78	15.3%
\$150,000 or more	8.21%	38	18.3%
Prefer not to answer	2.16%	10	

The lowest and highest income groups are under-represented relative to the U.S. population, and there is a higher concentration of respondents in the \$75,000-\$99,999 income group.

Respondents also provided some health data. There is a high proportion of smokers at 28%. This is far higher than the U.S. population smoker prevalence which is 12.5%¹⁰. The percentage of smokers in the insured population is lower still as take-up of life insurance is lower perhaps due to higher cost, and lapses tend to be higher for smokers.

68% classify themselves as chronic disease sufferers.

Current Health Status	Total 100% (463)	
No medical conditions diagnosed and not taking any medication (other than BCP)	31.53%	146
1-2 medical conditions, being followed by doctor and/or taking medication	46.44%	215
3 or more medical conditions, being followed by doctor and/or taking medication	22.03%	102

This is somewhat higher than the U.S. population where 60% have at least one chronic disease¹¹. The difference may be due to the older age group of respondents (35-75), the higher proportion of smokers and the higher female representation.

55% (256) of respondents use digital at-home monitoring devices. The most common is digital blood pressure monitors used by 82% (210) and followed by a digital scale used by 60% (154).

References

1. <https://www.hsbc.com/-/files/hsbc/media/media-release/2017/170609-updated-trust-in-technology-final-report.pdf>
2. <https://www.spglobal.com/marketintelligence/en/news-insights/research/robo-advisers-catching-on-in-china-industry-looks-poised-for-growth>
3. <https://foundation.scor.com/news/scor-tse-workshop-behavioral-insurance-economics-online-april-15-2021>
4. Bianchi, Milo and Briere, Marie, Augmenting Investment Decisions with Robo-Advice (July 5, 2021). Université Paris-Dauphine Research Paper No. 3751620, Available at SSRN: <https://ssrn.com/abstract=3751620> or <http://dx.doi.org/10.2139/ssrn.3751620>
5. Bianchi, Milo and Briere, Marie, Robo-Advising: Less AI and More XAI? (April 12, 2021). Available at SSRN: <https://ssrn.com/abstract=3825110> or <http://dx.doi.org/10.2139/ssrn.3825110>
6. <https://www.remarkgroup.com/en/global-consumer-study>
7. Claire Mouminoux, Jean-Louis Rullière, Stéphane Loisel. Obfuscation and Honesty Experimental Evidence on Insurance Demand with Multiple Distribution Channels. 2018. <https://hal.archives-ouvertes.fr/hal-01819522>
8. LIMRA Facts About Life 2021 <https://www.limra.com/siteassets/newsroom/fact-tank/fact-sheets/facts-about-life-2021-general.pdf>
9. <https://www.statista.com/statistics/203183/percentage-distribution-of-household-income-in-the-us/>
10. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm#featured-fact-sheets
11. <https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm>