The Digital Fiduciary™*

Overseeing Retirement Plans in the Digital Age

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Introduction

In the digital age, retirement security often depends more on fast decisions made online (and the designs that influence them) than on investment performance.

One of the primary duties of fiduciaries that oversee employee retirement plans is to ensure that they are providing a range of investment options from which participants can construct a well-diversified investment portfolio. This used to be a fairly straightforward task, as there were an extremely limited number of options. From 1952 to 1988, for instance, most university employees were offered just two investment funds.[1] People were given blank lines on a piece of paper and encouraged to mix the funds themselves; most opted for an even split among the options.[2] And academics weren't the only workers offered a relatively small choice set. In 1995, the average number of funds offered by 401(k) plans was only six.[3]

But the world has changed. The first change is a dramatic expansion of choice: by 2005, the typical 401(k) plan offered fourteen investment options, a doubling of alternatives in a single decade.[4] By 2014, that number had doubled again, with the typical retirement plan offering twenty-eight investment options.[5] (If you're an academic, you can often choose from more than thirty mutual funds.)

The second change is perhaps even more important, although it has received far less attention: plan participants now typically make their investment choices on a screen rather than on paper. This shift to the digital space can have huge implications. In an experiment Richard Thaler and I conducted on Morningstar. com, we asked two groups of Morningstar subscribers to allocate their retirement savings among eight different funds. The first group was presented with a website that had four blank lines on it, although there was a highlighted link if people wanted to select additional funds. The second group was shown the same exact site, except their version had eight available lines.

This might seem like a trivial design change. Nevertheless, Thaler and I found that the precise number of lines on a website dramatically impacted the level of diversification. While only 10 percent of people shown four lines selected more than four funds, that number quadrupled among subjects given eight lines.[6] This means that the level of diversification was driven, in large part, by a seemingly minor website specification.

[1] TIAA-CREF was the primary plan administrator for academics.
Samuelson, William, and Richard Zeckhauser. "Status quo bias in decision making." Journal of Risk and Uncertainty 1.1 (1988): 7-59.
[2] Samuelson, William, and Richard Zeckhauser. "Status quo bias in decision making." Journal of Risk and Uncertainty 1.1 (1988): 7-59.
[3] Investment Company Institute. "401(k) plans: A 25-Year Retrospective." November 2006, p. 17.
[4] Investment Company Institute. "401(k) plans: A 25-Year Retrospective." November 2006, p. 17.
[5] The Brightscope/ICI Defined Contribution Plan Profile. "A Close Look at 401(k) Plans, 2014," p. 32.
[6] Benartzi, Shlomo, and Richard H. Thaler. "Heuristics and biases in retirement savings behavior." The Journal of Economic Perspectives (2007): 81-104.

Similar issues affect nearly every aspect of digital design. Do opt-out rates depend on where the opt-out button is placed on the screen? Do the colors of the action buttons influence whether or not participants choose to cash out their savings when changing jobs? Do enrollment rates depend on the number of clicks it takes to enroll? While these design variables are often ignored, or left to the instincts of non-specialists, research shows that they can be key drivers of our decisions and the resulting retirement security of participants.[7]

There is a larger lesson here: if you want to do the right thing for your employees and plan participants—if you want to act prudently on their behalf— then you need to understand how people think and decide in the digital world. In the 20th century, overseeing an employee retirement plan meant having a deep knowledge and expertise of investing and plan design. In the 21st century, it is essential for plan sponsors to add effective digital design to their skill set. The evidence, after all, suggests that even minor changes to the online experience of participants—such as increasing the number of lines on a website, or changing the frequency of account feedback—can have a large and lasting impact on their financial success.

The demonstrated importance of the digital space has led Voya to found the Behavioral Finance Institute for Innovation, as well as invest in research aimed at gaining new insights into how people make financial decisions on screens, and how we can help them make better ones. (For more details on these research projects, please see Appendix A.)

Given the potential influence of digital design on participant choices, we have a responsibility to build websites and apps that encourage smarter decision-making, bringing the same oversight and diligence to our digital platforms that we currently bring to plan design.
As noted in the accompanying legal perspective (Appendix B), by Michael Hadley at Davis & Harman, it's appropriate for a fiduciary to take into account "whether the digital design of a plan's service provider's electronic portal properly seeks to encourage and facilitate good decision-making by plan participants and beneficiaries."

Why should we take this broader perspective on the responsibilities of plan sponsors and plan fiduciaries? There are two main reasons. First, the Employee Retirement Income Security Act (ERISA) of 1974 suggests that the obligations of a plan fiduciary can be reasonably extended to include the digital domain. While ERISA went into effect decades before the age of websites and apps, the legislation contains a crucial provision, which is that fiduciaries must act with diligence "under the circumstances then prevailing." In the 21st century, these circumstances certainly include online interactions, as most employees will make their choices online. In the digital age, retirement security often depends more on fast decisions made online (and the designs that influence them) than on investment performance.

Second, one of the best ways to minimize legal liability (apart from fully complying with the law, of course) is for participants to be satisfied with their retirement outcomes, since satisfied participants are much less likely to make claims against plan fiduciaries. As we'll learn in this white paper, digital design exerts a strong influence on retirement outcomes, which is why it's so important to ensure we use those design elements that are "consistent with the plan's character and aim to generate adequate retirement savings," as noted in the accompanying legal perspective.

To demonstrate the importance of the online world for plan sponsors and fiduciaries, this paper will explore the impact of screens on a retirement account over its entire life-cycle, from origination to draw-down. As we will see, not optimizing a retirement website is itself a choice. It's just probably not a good one. Regardless of the potential legal obligations, we should still feel a strong responsibility to help participants make better online financial decisions.

[7] Benartzi, Shlomo and Jonah Lehrer. The Smarter Screen: Surprising ways to influence and improve online behavior. Penguin, 2017.

Plan enrollment on screens

The impact of digital design begins with whether or not an employee chooses to open an account. After all, it doesn't matter how good the plan's investments are or how generous the employer match is – if you can't get people to join, then all of those benefits are irrelevant. While these sign ups used to be done with pen and paper, they are now typically done online, with people being asked to visit a website and set up their own account. In theory, it's a more efficient process.

However, if screen enrollment is not done properly—if it fails to incorporate key behavioral insights—then it can lead to a reduction in the number of new enrollees. To understand why online enrollment can lead to reduced enrollment rates, I conducted a pilot experiment with John Beshears of Harvard and Katherine Milkman and Yiwei Zhang of Wharton. After replicating a typical online enrollment process, we found that about 40 percent of college-educated subjects admit they are "not likely" to complete the process by themselves.[8] Why not? One of the main impediments is the creation of a username and password, as people struggle to fulfill the security requirements. If we apply these findings to the real world, it suggests that many users will give up after a few frustrations with the website.

Of course, this doesn't mean plan sponsors should reduce their security requirements. Perhaps the most important task of plan sponsors and fiduciaries is ensuring that a participant's savings are not mishandled or stolen. However, when designing a security process it is also important to consider the potential impact on enrollment.

Fortunately, these tradeoffs can be managed by adopting proven and scalable strategies from the digital world, which allow us to minimize the burden on participants while still maintaining high security standards. One relevant solution comes from the world of college loan applications, which are also unwieldy, complex and intimidating. To make this process easier, researchers partnered with H&R Block to create software capable of automatically filling in up to two-thirds of the application based on available family tax returns.

[8] This estimate was based on asking subjects to complete a ten-point scale, with 10 meaning they "were very likely to finish." 38 percent of people estimated their likelihood of finishing at 3 or less.

This simple intervention came with impressive results. After H&R Block made the forms easier to complete, students were 40 percent more likely to submit a loan application, 33 percent more likely to receive a needs-based scholarship, and 25 percent more likely to attend college.[9] That's a large improvement from a simple digital fix.

In the financial industry, many people assume that ease of access and security cannot go together, that protecting participants requires complicated and onerous security procedures. But that's not necessarily the case in the 21st century. Thanks to new technologies, such as auto-fill, biometrics and multifactor authentication with tokens, it's possible to design an enrollment process that it both relatively easy and highly secure.

Saving on screens

When employees are automatically enrolled into a 401(k) plan, more than fifty percent are enrolled with a default deferral rate of three percent or less.

Enrolling participants is merely the first step. One of the other crucial ingredients for retirement success is ensuring that participants are saving enough to maintain their desired lifestyle in retirement. Unfortunately for many plan participants, that's often not the case. For example, when employees are automatically enrolled into a 401(k) plan, more than fifty percent are enrolled with a default deferral rate of three percent or less.[10] This means that plan administrators need to have a set of tools that can help people increase their contributions.

One such tool involves the design of a plan's websites. Consider a study I worked on with Saurabh Bhargava and Lynn Conell-Price at Carnegie-Mellon and Richard Mason at City, University of London.[11] The research was conducted in collaboration with Voya Financial. We looked at the enrollment choices of 8500 employees from 500 different employers using a variety of different presentation and informational designs for the landing page. In particular, the sample included employees who visited the plan website to either accept the automatic enrollment defaults, customize their plan elections, or decline enrollment and opt out. The design variations included the use of alternate headlines for each enrollment option, assigning different colors for each option, standardizing the language used to describe each option, and explicitly adding additional information about plan details, such as the default rate or the employer match.

We found that improving the design could have a large, significant, and positive influence on the enrollment choices of American workers, as it helped more participants save at a rate higher than the default. Among other improvements, the enhanced designs increased the share of workers who personalized their enrollment to 69 percent, an increase of 9 percentage points. This suggests that more employees made informed choices about how much they wanted to save. Overall, the enhanced designs led to an increase in average employee contributions of 62 basis points from a 5.41 baseline, an increase of roughly ten percent. That boost in savings is equivalent to the increase predicted from increasing the typical employer match limit by 62 percent. Although these digital interventions featured small design enhancements to the enrollment interface, and cost virtually nothing to implement, they can significantly impact the retirement savings of American workers.

[9] Bettinger, Eric P., et al. "The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment." The Quarterly Journal of Economics 127.3 (2012): 1205-1242.
[10] Plan Sponsor Magazine, 2016 Plan Sponsor DC survey.
[11] Bhargava, Saurabh, Lynn Conell-Price, Richard T. Mason, and Shlomo Benartzi. "Save(d) by Design," Working Paper, September 2018.

Employers can double and triple the most commonly used suggested savings rate (3 percent) without reducing enrollment.

Of course, it's often necessary to intervene after the initial enrollment decision, as many participants need to increase their savings rate in order to stay on track for a successful retirement. Such interventions often take the form of emails extolling the benefits of higher savings rates. These email campaigns are well intentioned. However, new research suggests that, in order to make these emails effective, their content should be tailored to the time of day they are sent. In studies of cigarette smokers conducted by the Behavioral Insights Team of 10 Downing Street, researchers found that people were more likely to commit to quitting smoking if they received a simple and pared down email in the morning, presumably because they lacked the attention to process more complex messages at that time of the day.[12]

And it's not just the time of day. Research conducted by Hengchen Dai, Katherine Milkman and Jason Riis suggests that we're also more likely to make responsible decisions about the future, such as joining a gym, on particular days, such as a birthday, anniversary or start of the year.[13] John Beshears, Hengchen Dai, Katherine Milkman and I recently tested the effectiveness of this phenomenon – which we refer to as the Fresh Start Effect – on increasing saving rates. Using a sample of 8,682 employees at four universities, we found that asking people to start saving after a personalized landmark, such as their next birthday, led to higher savings rates.[14] More recently, I conducted research with a team of behavioral economists showing that a behaviorally informed email campaign sent to more than 800,000 employees at the Department of Defense generated more than $1600 dollars in additional savings for every $1 invested in the nudge.[15]

The Fresh Start effect can help us improve the timing of our "save more" interventions. However, we still need to figure out what savings rate to suggest. While many employers are reluctant to suggest significantly higher contribution rates to their employees—they are concerned about potential blowback—new Voya research by John Beshears, Katherine Milkman, Richard Mason and I suggests that such fears are largely unwarranted. In fact, employers can double and triple the most commonly used suggested savings rate (3 percent) without reducing enrollment.[16] Meanwhile, these higher suggested rates lead to meaningful improvements in the financial security of participants. To learn more about this research, please see the Appendix.

[12] Thank you to Michael Hallsworth of the Behavioral Insights Team for sharing the study results.
[13] Dai, Hengchen, Katherine L. Milkman, and Jason Riis. "The fresh start effect: Temporal landmarks motivate aspirational behavior." Management Science 60.10 (2014): 2563-2582.
[14] Beshears, John, Hengchen Dai, Katherine Milkman, and Shlomo Benartzi. "Future-Oriented Nudges in the Field." Working Paper, 2017, Harvard University.
[15] Benartzi, Shlomo, et al. "Should Governments Invest More in Nudging?" Psychological Science (August 2017): 1041-1055.
[16] Beshears, John, Shlomo Benartzi, Richard T. Mason, and Katherine L. Milkman. "How Do Consumers Respond When Default Options Push the Envelope?" (SSRN #3050562) 2017.

Investing on screens

Technology can also impact how people feel about their investment returns. Richard Thaler and I have found that giving people more feedback about their investments can trigger a mental error known as myopic loss aversion.[17] That's a technical term for a very common mistake, which occurs when investors make decisions based on short-term losses in their portfolio, even when they should have a long-term investment plan for their retirement funds. Thaler and I demonstrated that this problem could be minimized if investors were shown longer-term rates of return.[18]

In the digital world, of course, people might look at their investment portfolio far more often, which means they are getting more short-term investing feedback. (More than half of smartphone owners check their phone several times an hour or more.[19]) My concern is that this habit could lead to worse investment choices. To help mitigate this problem, retirement plans should experiment with new default information settings, perhaps offering people longer-term return data instead of monthly or quarterly return data. (Consumers can still get the short-term feedback – it would just take a few extra clicks.) After the Israeli government instituted a similar reform in early 2010, the improvement was immediate, with investors trading less and taking smarter risks with their savings.[20] Over time, this should lead to significantly more money in their accounts.

Cashing out on screens

By making people more aware of the financial cost of early withdrawal, we can help them make choices better aligned with their long-term interests.

Getting people to save more and invest wisely is a great starting point, but it's not enough. Since employees are likely to switch jobs every few years, fiduciaries have to oversee what happens to those retirement accounts during job transitions. A recent survey found that roughly one in three workers cashes out part or all of their 401(k) account when changing jobs.[21] The impact of this "leakage problem" is serious, reducing retirement wealth by about 25 percent.[22]

How can we minimize the leakage problem? John Payne of Duke University and I have preliminary evidence that financial literacy is different on mobile devices, with people performing worse in response to basic financial questions on smaller screens. (This suggests that you might make worse money decisions on an iPhone compared to an iPad or laptop.) And it's not just financial literacy: Shiri Melumad at Wharton has shown that smartphones can lead to a more emotional style of decision-making.[23] In addition, recent work by scientists at the University of Texas and UCSD has shown that simply having a smartphone within reach — even if the screen is turned off — can significantly lower measures of attention and working memory.[24]

[17] Benartzi, Shlomo, and Richard H. Thaler. "Myopic Loss Aversion and the Equity Premium Puzzle." The Quarterly Journal of Economics 110.1 (1995): 73-92.
[18] Benartzi, Shlomo, and Richard H. Thaler. "Risk aversion or myopia? Choices in repeated gambles and retirement investments." Management Science 45.3 (1999): 364-381.
[19] http://www.gallup.com/poll/184046/smartphone-owners-check-phone-least-hourly.aspx
[20] Benartzi, Shlomo, and Richard H. Thaler. "Risk aversion or myopia? Choices in repeated gambles and retirement investments." Management Science 45.3 (1999): 364-381. http://www.gallup.com/poll/184046/smartphone-owners-check-phone-least-hourly.aspx
[21] https://www.fidelity.com/viewpoints/retirement/cashing-out
[22] Munnell, Alicia and Anthony Webb. "The Impact of Leakages on 401(k)/IRA Assets," Center for Retirement Research at Boston University. February 2015
[23] Melumad, Shiri, J. Jeffrey Inman, and Michel T. Pham. "The Distinct Psychology of Smartphone Use: Smartphone-Generated Content As Emotional Expression." Working Paper.
[24] Ward, Adrian F., et al. "Brain Drain: The Mere Presence of One's Own Smartphone Reduces Available Cognitive Capacity." Journal of the Association for Consumer Research 2.2 (2017): 140-154.

These findings have potentially huge implications for which kinds of financial decisions we allow people to make on various devices. Although 80 percent of industry experts believe that plan providers are going to offer the exact same transactional capabilities on their mobile app and website, this might be a misguided approach.[25] Instead, we should encourage people to make important and irrevocable financial decisions – such as choosing whether to cash out a plan – on the devices that lead to the most reflective and responsible forms of decision-making. If a sponsor insists on allowing cash-outs on mobile devices, then they should also consider behavioral interventions to minimize the downside. One potentially useful tool is personalized videos, which uses content tailored to the individual to increase engagement, boost financial awareness and drive action. By making people more aware of the financial cost of early withdrawal, we can help them make choices better aligned with their long-term interests.

Drawing down assets on screens

Digital design even matters at the end of the accumulation phase, as people hit retirement and look for smart ways to drawdown their life savings. The United Kingdom government, for example, is encouraging retirees to shop for retirement income products online instead of automatically signing up for the products available via their employer plan. In this new environment, more and more citizens will make one of the most important financial decisions of their lives on a screen. This means that it's essential we understand the implications of our digital choice architecture. Should the annuity options be listed in a horizontal or vertical format? (Studies of online shoppers suggest that this design choice can have a big impact.[26]) How many options should be displayed on the screen? What categories should be used to help people form a manageable consideration set?[27] While the particular details are beyond the scope of this paper, it's clear that these details can play an influential role in our retirement decisions.

[25] Transamerica Retirement Solutions, 2013, "Prescience 2017: Expert opinions on the future of retirement plans."

[26] Shi, Savannah Wei, Michel Wedel, and F. G. M. Pieters. "Information acquisition during online decision making: A model-based exploration using eye-tracking data." Management Science 59.5 (2013): 1009-1026.

[27] Bhargava, Saurabh, George Loewenstein and Shlomo Benartzi. "The Costs of Poor Health (Plan Choices) and Prescriptions for Reform." Behavioral Science & Policy. Vol 3, Issue 1: 1-12 (2017)

Summary

If we want to help people have a successful retirement, then we have to help them manage their digital financial life and not just their investment funds.

We live in the digital age: the average American now spends the majority of his or her waking life staring at a screen.[28] If we want to help people have a successful retirement, then we have to help them manage their digital financial life and not just their investment funds. By offering people effective digital design—by providing them with websites and apps that reflect the latest research on human behavior—we can help them make better decisions, which can lead to improved financial outcomes. And while it's obvious that scientists like me don't have all the answers, that is not an excuse for inaction. Rather, it should inspire us to conduct more carefully controlled experiments, as we seek to develop digital designs that encourage people to build a secure financial future.

The retirement industry has been held back by its lack of rigorous research, especially when compared to credit card companies, retail websites or online travel agencies like Expedia. For instance, we know that offering people eight lines to list their investment choices leads to more diversification than four lines. But what about six or ten lines? Does the color of the action buttons influence the enrollment choices of participants? How can new digital tools, such as personalized video or just-in-time financial education, be used to help people make more prudent decisions?

Retirement plan providers are extremely well positioned to lead and innovate in the design of financial websites, apps and other online platforms. They have access to relevant data, large scale and the ability to customize digital journeys. They can use these advantages to pioneer designs that increase the financial security of American workers.

In that spirit, I propose seven actionable steps for plan sponsors and advisors that can help create a design process to enhance the financial wellbeing of participants.

[28] The Nielsen Total Audience Report, 2016.

1. Establish a Digital Policy Statement	Virtually all plans have an investment policy statement that lays out their investment objectives, and establishes criteria and procedures for selecting investments. Sponsors should consider establishing an equivalent statement for digital policies, laying out the objectives of a plan provider's digital designs, as well as describing the process for measuring and improving those designs. For the largest plans, digital design decisions are typically implemented on a plan-specific website that's often built by or for the sponsor. For other plans, design decisions are more likely implemented through selecting a service provider whose participant website most closely aligns with the sponsor's digital priorities. Just as the investment policy statement helps plans balance the tradeoffs of risk and return when it comes to potential investments, so can the digital policy statement help plan providers consider the costs and benefits of various digital features, whether it's making enrollment easier, or raising the default savings rate.
2. Incorporate Design Knowledge on the Plan Committee	Given the importance of design factors in shaping participant behavior and retirement outcomes, sponsors should identify those responsible for ensuring the Digital Policy Statement is followed. For the largest plans, this may mean adding a digital expert to the plan committee. For other plans, there may be an internal expert, or the sponsor may choose to ensure that the plan advisor or another third party executes the digital policy statement when selecting service providers. More generally, design variables should be treated with similar rigor as plan investment decisions. Plan sponsors should ask providers what they are doing to improve their digital design, and work as active partners to test and improve their digital offerings.
3. Test, Test, Retest	It's crucial that plan sponsors select plan providers that routinely test different digital designs. However, it's equally important that such testing is done in a rigorous and careful manner. The tests should begin with a specific goal—say, increasing enrollment—and should feature an A version and a B version, with the better performing alternative becoming the basis for the next iterative test. Constant improvement is the goal, and this is a great area for plan sponsors and providers to collaborate.
4. Follow the Science	Plan sponsors and their provider should ensure that their digital designs reflect the latest academic research. While we're only beginning to understand all of the ways digital design can impact behavior, and how we can use digital technology to improve behavior, there's a growing scientific literature that can be used to inform plan design and testing. For instance, a recent Voya working paper led by John Beshears of Harvard, Rick Mason of City University of London, Katy Milkman of Wharton and I found that it was possible to increase the suggested saving rate of participants—and boost their retirement savings by nearly 10 percent—without significantly increasing the number of participants dropping out of the savings plan.
5. Evidence Based Innovation	It's exciting to develop tools and programs for the latest technology. Right now, for instance, some plan providers are launching applications for smart speakers, such as Amazon's Alexa devices. However, it's crucial that we fully consider the potential consequences of these new technologies. Will giving people access to their financial information on a smart speaker help them sleep better at night, since they can now easily get updates on their portfolios? Or might it trigger myopic loss aversion instead, as all that additional feedback makes people extremely sensitive to short-term losses and can lead them to sell their investments during market downturns? The larger lesson is that we need to carefully measure the behavioral implications of our digital tools, both to maximize the upside (such as the increased savings that come from improved web design) and minimize the downside (such as the link between additional feedback and myopic loss aversion.)
6. Make The Right Thing Easy	One of the biggest lessons from behavioral finance is that defaults can strongly influence decision-making. In the online world, there are many defaults to consider, from suggested saving rates to a participant's expected retirement age. When looking to help people make better decisions on screens, rethinking existing defaults and considering new defaults is often the lowest hanging fruit. That's why plans should conduct a default audit, assessing the implications of every online default and looking for ways to use the power of defaults—they make a given choice extremely easy—to improve retirement outcomes.

7. Think of 21st Century Risks

It's essential that plan sponsors and advisors think more broadly about risk. Right now, the focus is almost exclusively on investment risk. However, given the influence of the digital world, we should also consider a range of other risks for participants. Consider the problem of "digital exclusion," in which certain participants might have a harder time navigating the steps for online enrollment. How can we help these participants, as not enrolling in a plan represents a large risk for their future financial security? Similarly, consider the risk of cyber fraud, which could be greater for a given individual than market risks.

By working with plan providers to implement these steps, retirement plan committees can minimize their legal liabilities. Regardless of future fiduciary regulations, history teaches us that a reliable way to avoid potential litigation is to ensure the success of plan participants and to develop processes for determining which digital designs and elements are most relevant for participant success. In the past, these concerns led plan sponsors and providers to focus on investment oversight. In the future, these same concerns should lead plan sponsors and providers to also focus on how the design of their websites and apps can shape the decisions of participants, and how improved design can lead to improved retirement outcomes.

Appendix A: Voya research

The reflection index

To better understand how participants make important retirement decisions online, Voya has developed a Reflection Index capable of assessing whether participants are using an instinctive or reflective thought process. (The Index looks at measurements of attention, information gathering and whether or not participants are considering various tradeoffs, such as the impact of saving more on their projected income.) As outlined in the 2016 Voya paper, "Using Decision Styles to Improve Outcomes," written by Professor Shlomo Benartzi at UCLA and Senior Academic Advisor at the Voya Behavioral Finance Institute for Innovation, the average participant does not engage in a reflective thought process when making retirement decisions online. Instead, they tend to make instinctive decisions, quickly reviewing the information and failing to consider the tradeoffs of various retirement alternatives.[29] The paper makes practical suggestions for how to improve retirement outcomes given this lack of reflection, such as re-enrollment.

Smarter suggested saving rates

To help American workers achieve financial security, Voya and researchers at Harvard, UCLA, the Wharton School and City, University of London have begun researching the impact of suggested savings rates on employee decisions.[30] To explore the potential benefit of higher display rates, Voya has conducted a randomized trial looking at enrollment status and savings rate of employees who are assigned significantly higher savings rates when enrolling online. Can higher suggested rates be used to help more workers save a sufficient amount for retirement?

According to the data, suggested savings rates can be significantly increased without triggering an increase in the number of participants choosing not to participate in the savings plan. Specifically, suggesting rates between 7 and 10 percent did not result in lower enrollment when compared to a 6 percent control rate. Most importantly, these higher suggested rates lead to improved financial outcomes, as the minor changes to the website boost retirement income by nearly ten percent.

Digital enrollment architecture

To further our understanding of the online enrollment process, Voya and behavioral scientists at Carnegie Mellon University, UCLA and City, University of London have conducted a study looking at how slight variations to the online enrollment architecture of the website can influence the enrollment decisions of employees. Among other findings, the researchers have shown that enhanced enrollment designs can boost the average savings rate by 62 basis points, or roughly 10 percent. That boost in savings is equivalent to the increase predicted from increasing the typical employer match by 62 percent. Furthermore, because of the "stickiness" of an employee's initial contribution decisions, these increases in contributions due to design can lead to meaningful improvements to long-run retirement security.

[29] Benartzi, Shlomo. "Using Decision-Styles to Improve Financial Outcomes — Why Every Plan Needs a Retirement Check-Up." 2016.
[30] Beshears, John, Shlomo Benartzi, Richard T. Mason, and Katherine L. Milkman. "How Do Consumers Respond When Default Options Push the Envelope?" (SSRN #3050562) 2017.

Appendix B: Fiduciary concerns and digital design

By Michael Hadley, Partner, Davis & Harman LLP

This paper, a companion to the paper by Shlomo Benartzi entitled "The Digital Fiduciary – Overseeing Retirement Plans in the Digital Age," addresses the interaction of an employer's fiduciary obligations and the digital design of the plan.

Because much of a retirement plan's interface with participants is now done online or through apps – with participants and beneficiaries making many critical financial decisions while looking at screens – it is worthwhile to consider what the Employee Retirement Income Security Act of 1974 ("ERISA") has to say about the digital design of the plan. By "digital design" I mean the design of the plan's electronic portal, whether web- or app-based, through which participants and beneficiaries interact with the plan; access static and dynamic educational and advice materials; and make elections as to enrollment, contributions, investment allocation, loans and distributions.

Introduction

There is no provision in ERISA, nor any Department of Labor ("DOL") regulation or guidance, that directly addresses fiduciary obligations with respect to a plan's digital design. Nonetheless, a good bit can be indirectly gleaned from what ERISA does say about a plan fiduciary's general prudence obligation and from a variety of DOL guidance on how fiduciaries should oversee defined contribution plans that empower participants and beneficiaries to make choices about the contributions, investment allocation, and distributions. Taken together, these sources suggest that a prudent fiduciary *may appropriately take into account, in selecting and monitoring the plan's service provider, whether the digital design of a plan's service provider's platform properly seeks to encourage and facilitate good decision-making by plan participants and beneficiaries.*

Of course, the digital design of a service provider's electronic portal is only one factor that a plan fiduciary should consider in selecting and monitoring its service provider. There are many other factors that are and should be considered, including the services and investments offered, quality of recordkeeping and content of education materials, level of attention to ensuring compliance with legal requirements, and the reasonableness of fees. The purpose of this paper is to explain why digital design is appropriate to add to the list.

To be clear, I am not saying that considering digital design is either a necessary or sufficient condition to avoiding fiduciary liability, or that there is only one "prudent" approach to how participants and beneficiaries interact with the plan online. Class action plaintiff firms have discovered 401(k) and 403(b) plans as fertile grounds to bring lawsuits and secure settlements and unfortunately no one action makes plans immune from being targeted by these firms. The best a fiduciary can do is work hard on a prudent fiduciary decision-making process.

In my experience, the vast majority of plan fiduciaries think of their fiduciary obligations not in term avoiding getting sued but rather truly with an eye to administer the plan to achieve the best possible outcome for employees and their families. Accordingly, this is not a "scare" paper; my purpose is to help fiduciaries feel comfortable that the design of plan's digital interface is an important consideration in plan administration.

Settlor versus fiduciary administration functions

Most employers wear two hats with respect to their retirement plan. First, the employer determines the terms of the plan, embodied in the plan document, which is considered the employer's "settlor" function. For our purposes here, this means that the employer determines which decisions will be handed over to participants and beneficiaries. In most modern 401(k) and 403(b) plans, the following decisions are typically given to participants (and in some cases to their beneficiaries upon their death):

- Whether to contribute to the plan, and at what level, and whether to make rollover contributions. Even if the plan uses automatic enrollment, the ultimate contribution decision belongs to the participant.
- Whether those contributions are made on a pre-tax or Roth basis, or a combination.
- How to allocate the account among the investment options made available on the plan's investment menu and whether to access optional features like a managed account, brokerage window, or investment advice service.
- When to take withdrawals, distributions and/or loans from the plan, and in what form.

The employer's determination to hand over these decisions to employees is made on a "settlor" basis, memorialized in the plan document, and is not directly governed by fiduciary considerations.[1]

The second hat that an employer wears is the fiduciary hat. The plan document will appoint one or more "named" fiduciaries to administer the plan, that is, to turn the plan's design into reality. The plan fiduciaries are obligated to follow the plan document unless doing so would itself violate ERISA.[2] Many employers appoint an internal committee to act as the named fiduciary.

Plan documents are silent on a great number of aspects of plan administration. In particularly, most plan documents, deliberately, say very little about how the fiduciary should administer the decisions that have been given to participants and beneficiaries. At most the plan document might set out the frequency decisions can be made (i.e. investment reallocation must be allowed at least once a quarter) and determine defaults like contribution levels for automatic enrollment. But the plan document looks to the plan fiduciary to *create the conditions by which participants and beneficiaries can understand their choices and make informed decisions.*

ERISA'S flexible fiduciary standard

In administering the plan, ERISA commands that fiduciaries meet what is sometimes called the "prudent expert" standard. If the reader has acted as a fiduciary to a retirement plan for any length of time, the following language that has been in ERISA since 1974 will be very familiar, but I want to highlight a few phrases that often receive less attention:

> [A] fiduciary shall discharge his duties with respect to a plan solely in the interest of the participants and beneficiaries and—
>
> (A) for the exclusive purpose of: (i) providing benefits to participants and their beneficiaries; and (ii) defraying reasonable expenses of administering the plan; [and]
>
> (B) with the care, skill, prudence, and diligence *under the circumstances then prevailing* that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of *an enterprise of a like character and with like aims…*[3]

Let's focus first on the phrase "under the circumstances then prevailing." This phrase tells us that Congress intended a fiduciary to adapt plan administration to the current situation. Congress anticipated that circumstances might change. Plan design might change, investment conditions might change, and participant needs and desires might change. In fact Congress knew that the very notion of how an employee interacts with his or her retirement plan might be different in 2018 than it was in 1974. This proved prescient: section 401(k) plan did not even exist in 1974 and certainly Congress did not anticipate the modern 401(k) design we have today, with automatic enrollment, default investments, daily valuation, and personalized investment advice and education. Congress could not have foreseen the impact of the Internet, with employees being able to log on to a secure website with personalized account information updated daily. But Congress did impose on fiduciaries the obligation to keep up with these changes and administer a plan according to the current circumstances. Accordingly, even though no fiduciary in 1974 would have needed to consider the digital design of the plan's web portal, the fact that a substantial percentage of participant interactions are online is a circumstance that is *now prevailing*.

[1] See Department of Labor, Meeting Your Fiduciary Responsibilities (Sept. 2017), p.2.
[2] ERISA § 404(a)(1)(D).
[3] ERISA § 404(a)(1)(A), (B).

So fiduciaries often must tailor plan administration to participant demographics because those demographics are part of the "circumstances then prevailing." For example, if a substantial portion of employees are literate in a language other than English, DOL regulations provide that the summary plan description must be adapted to meet the needs of those employees.[4] Similarly, various court cases have confirmed that fiduciaries sometimes have a duty to volunteer information when the fiduciary knows or should know that a participant or beneficiary has unique circumstances that might make silence harmful.[5] And the fact that most employees will perform most transactions online is a similarly relevant fact.

Now let's focus on the phrase "an enterprise of a like character and with like aims." This tells us that fiduciaries should ask themselves: What is the "character" of the plan? What are the plan's "aims"? And how would a prudent person who is familiar with such an enterprise approach the issue? In a typical defined contribution plan, the "character" of the plan is largely driven by decisions that must be made by participants and beneficiaries. And the "aim" of the plan, at least in part, is to have participants and beneficiaries make decisions that will provide income security in retirement. That is not to say that the plan guarantees such an outcome, but that is its *aim*.

Almost every description of ERISA's prudence standard points out the important fact that ERISA requires not an outcome but a process—that fiduciaries act with care, skill, prudence, and diligence. The process includes determining *which* facts and circumstances are relevant and then appropriately considering those facts and circumstances in the course of decision making.[6]

Fiduciaries routinely engage a service provider to assist in administration, and the selection and regular monitoring of the plan's service provider is one of the most important tasks of plan fiduciaries. The circumstances now prevailing are that all defined contribution recordkeepers offer web-based, and sometimes app-based, portals for participants and beneficiaries to interact with the plan. And if the character and aim of the plan means, at least in part, that the fiduciaries should seek to encourage good decision making by participants and beneficiaries, then it is entirely appropriate to consider the digital design of the provider's electronic portals and screens and to ask questions about how the provider's design can help implement the plan's character and aims. And it is entirely appropriate that these considerations play in role in selecting and retaining the plan's service provider.

Specific fiduciary requirements relevant to digital design

In the prior section, I addressed how one might think about digital design in the context of ERISA's general and flexible duty of prudence. But there are also some specific requirements that fiduciaries are tasked to meet that, one might say, support consideration of good digital design. None of these address digital design per se, but they form a tapestry of rules around helping participants and beneficiaries make informed decisions and occasionally nudging them to do so.

Section 404a-5 Participant Disclosure Rules. In 2010, DOL implemented a regulation requiring the plan administrator of a participant-directed defined contribution plan to provide, upon enrollment and annually thereafter, a notice that describes the plan's investments and fees and provides information about how participants or beneficiaries may give investment instructions. This has come to be known as the "participant fee and investment notice" or the "404a-5 disclosure." The regulation begins, however, with the premise that when the plan document provides that participants and beneficiaries have been given responsibility to allocate the investments in their account, the plan administrator "must take steps to ensure … that such participants and beneficiaries, on a regular and periodic basis, are made aware of their rights and responsibilities with respect to the investment of assets held in, or contributed to, their accounts and are provided sufficient information regarding the plan, including fees and expenses, and regarding designated investment alternatives, including fees and expenses attendant thereto, to make informed decisions with regard to the management of their individual accounts."[7] The regulation goes on to say that the providing the participant fee and investment notice will satisfy this duty. Of course, most plan administrators do more than simply provide this notice once a year; most plans provide detailed and often interactive information on the plan's investment menu through the plan's dedicated web portal. Ensuring the design of that portal assists participants and beneficiaries in making informed decisions is consistent with the underlying premise of the section 404a-5 regulation.

To its credit, DOL actually included a principle of good digital design in the section 404a-5 regulation. The regulation uses a "layered" disclosure approach: the information deemed most important to communicate about the plan's investments is automatically provided in the investment chart, but more detail is provided on a website, and even more information is available upon request. And most good digital design uses layers with hyperlinks to keep the most important information in the forefront with more detail available through links.

[4] See 29 C.F.R. § 2520.102-2(c).
[5] See, e.g., Van Loo v. Cajun Operating Company, No. 14-cv-10604, 2014 WL 675043 (E.D. Mich. Dec. 1, 2014); Krohn v. Huron Mem' Hosp., 173 F.3d 542, 550 (6th Cir. 1990).
[6] See 29 C.F.R.§ 2550.404a-1(b)(1).
[7] 29 C.F.R. § 2550.404a-5(a).

Section 404(c) Rules. ERISA section 404(c) provides fiduciary relief in the context of plans that give participants and beneficiaries the right to exercise investment control over their account. DOL's implementing regulations, unsurprisingly, condition this relief on participants and beneficiaries being provided a "reasonable opportunity" to give instructions "in writing or otherwise" and an opportunity to obtain sufficient information to make informed decisions.[8] While there are a variety of ways participants and beneficiaries might be given the reasonable opportunity to exercise their investment rights, how that information is presented helps to ensure that the opportunity is real. This is not to suggest, of course, that section 404(c) relief is available only for particular digital designs: there are many reasonable ways to comply with the regulation. Rather, the point here is that the regulations confirm that the character and aim of a plan intending to comply with section 404(c) entails a reasonable mechanism to allow investment instructions, and thus considering the digital design of the investment selection tool is consistent with evaluating the reasonableness of the mechanism.

PPA's Default Rules. In the Pension Protection Act of 2006, Congress included a number of provisions supporting the use of defaults in contributions and investments. Congress expressly recognized that in many cases we can use the power of inertia to generate better outcomes: nudging participants to contribute to the plan and increase those contributions over time, and nudging them to allocate their account to an investment that is appropriate for retirement savings.[9] All in service of these goals, Congress provided special nondiscrimination safe harbors for plans utilizing automatic enrollment and escalation[10], state-law preemption for plans that use automatic enrollment[11], a new short-term distribution option for plans with automatic enrollment[12], and fiduciary protection for default investments[13]. Digital design, in large part, seeks to harness behavioral tendencies towards inertia by focusing on how we present choices on screens and which boxes are checked by default.

The PPA rules come with notice requirements[14] that are designed to help employees understand the plan's various defaults (contribution rate, escalation, and qualified default investment alternative), and how elect out of those defaults. Because these notices are designed to meet legal requirements, by necessity they are often written in legalese. The digital design of the enrollment screen can supplement the required notices by presenting defaults in an understandable way while also communicating in a visually compelling fashion the implications of opting out of the default. For example, a digital design that communicates that the plan's default contribution rate is only a starting point and nudges the participant to a higher rate is consistent with the plan's character and aim to generate adequate retirement savings.

DOL's E-disclosure Regulation. I said earlier than there is no DOL guidance directly addressing digital design. DOL does have, however, a regulation that governs use of electronic media to make required ERISA disclosures such as the summary plan description.[15] This regulation has not been updated since 2002 and is recognized by many as being outdated. (Unfortunately, many plans still send reams of paper to participants, with unfortunate cost and environmental impacts.[16]) Because the regulation governs the legally required documents, the regulation is not applicable to most of the ways digital design affects participant behavior. Nonetheless, a fiduciary should ensure that to the extent the plan's web and app portals are delivering legally required documents in lieu of paper, the regulation is met. For example, legally required documents must be "prepared and furnished in a manner that is consistent with the style, format and content requirements applicable to the particular document."[17] In addition, for employees who have consented to e-disclosure of required documents, the consent must be done "in a manner that reasonably demonstrates the individual's ability to access information in the electronic form that will be used to provide the information that is the subject of the consent."[18]

Tips for overseeing service providers

We have long recognized that most fiduciaries of ERISA plans are not experts in all the skills needed to administer retirement plans. DOL has confirmed that "[l]acking that expertise, a fiduciary will want to hire someone with that professional knowledge to carry out the investment and other functions."[19] Some employers may actually have in-house expertise on web and app design, but most of the hundreds of thousands of businesses that offer 401(k) plans will not.

[8] 29 C.F.R. § 2550.404c-1(b).
[9] 152 Cong. Rec. 8688, 8761, 8762 (daily ed. Aug. 3, 2006) (statements of Sen. Kennedy, Sen. Reed, and Sen. Baucus).
[10] I.R.C. § 401(k)(13).
[11] ERISA § 514(d).
[12] I.R.C. § 414(w).
[13] ERISA § 404(c)(5).
[14] 26 C.F.R. §§ 1.401(k)-3(k)(4), 1.414(w)-1(b)(3); 29 C.F.R. § 2550.404c-5(d).
[15] 29 C.F.R. § 2520.104b-1(c). DOL has also provided guidance on e-disclosure in the context of specific disclosures. See Field Assistance Bulletin 2006-03 (periodic benefit statements); DOL Technical Release 2011-03R (participant fee and investment notice). There are also regulations governing e-disclosure of notices required by the Internal Revenue Code. See 26 C.F.R. § 1.401(a)-21.
[16] Various bipartisan bills have been introduced to update the rules for the 21st century. See, e.g., Receiving Electronic Statements to Improve Retiree Earnings Act, H.R. 4160 (115th Congress), which as of August 2018 had 42 co-sponsors from both parties.
[17] 29 C.F.R. § 2520.104b-1(c)(1)(ii).
[18] Id. at -1(c)(2)(ii)(B).
[19] Department of Labor, Meeting Your Fiduciary Responsibilities (Sept. 2017), p.2.

That doesn't mean that trying to optimize the digital design of the plan is out of reach. The key, like all parts of plan administration handed over to third parties, is to ask questions about this aspect of the provider's service, consider it among the criteria for evaluating current and potential service providers, and then continue to evaluate the design through metrics over time.

Potential providers are typically excited to demonstrate their web and app capabilities during a finals presentation. Along with now standard questions about the security and privacy of the portal, a fiduciary might ask:

- how the design aligns with the goals of getting employees enrolled and properly diversified in the account;
- whether the provider has based its design on the latest research on participant behavior;
- what testing is done on the design;
- what resources the provider has put into innovation over time; and
- what reports with actionable metrics can be provided to fiduciaries on a regular basis.

Many plans also use an advisor or consultant that assists in evaluating the primary service provider. Advisors and consultants often have a standardized RFP process to evaluate providers. Fiduciaries that determine that digital design is an important aspect of plan administration should make this goal known to the advisor or consultant so that this can be considered in the initial RFP and the advisor or consultant can ensure that the provider includes metrics on success in the regular plan reports that fiduciaries review.

Parting thoughts

This paper has focused on one matter fiduciaries may consider in plan administration, including in evaluating the plan's service providers. It's fair enough to ask how important the digital design of the plan is relative to other metrics, such as investment returns or fees. That's not for me or anyone else – including the Department of Labor – to definitively answer, because each prudent decision making process might weigh different facts and circumstances slightly differently. The best advice, as in all aspects of plan administration, is to gather information, take the time to consider it and discuss it within the fiduciary committee, make decisions with the sole interest of the participants and beneficiaries in mind, and then document the information reviewed and decisions that were made.

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