Helping Them Get There:

Tools to Increase Participation and Savings in Defined Contribution Plans

EXECUTIVE SUMMARY

Employees know they need to save. They may be unsure of how much. And they may be reluctant to save. But they do know what they need to do – enroll in a retirement plan and save for retirement.

People don't enroll and save adequately for a variety of reasons, many of which are based on emotion. Unfortunately, these emotional reasons do not result in outcomes in the best interest of the employee – that is, a financially secure retirement.

In the last five years, the defined contribution (DC) retirement system has grown more aware of the value of using behavioral economics to explain how and why people make saving and investing decisions that do not appear to be in their best interest. Even more importantly, the DC system has shifted to embracing what normally would be considered emotional behaviors inhibitive to retirement savings (e.g., inertia, high discounting, loss aversion, information overload) as fundamental motivators for a new set of tools to engage employees to save in spite of themselves.

This paper describes the efficacy and fit of a range of tools to address the most common behavioral/emotional issues that hinder employees from enrolling and increasing deferrals, two behaviors that are critical to successful retirement savings. Understanding your employees and their tendencies will help you identify and implement the best solution to meet their needs.

Introduction

Employers continue to wrestle with how best to help their employees prepare for retirement. Over the past twenty years, DC retirement plans have offered more diverse investment options, more matching contributions, and investment education – all to make plan participation more attractive and productive. Still, only about 50% of U.S. employees actually participate in a voluntary contribution plan.[1]

There are a number of reasons for non-participation. An employer may not offer a plan, or an employee may not be eligible to participate. Even those eligible to participate may decide it is not in their interest to do so. Low-income employees, for example, may believe that their high replacement rate through Social Security will adequately provide for their retirement needs. In addition, they may find the tax incentive of a tax-deferred retirement plan too weak.[2]

Research indicates that there is something more going on than pure rational economic choice. Rational economic logic should lead to behaviors of enrolling and saving, if the vehicle and the means are available. But an estimated 30% of eligible employees do not choose to participate in a 401(k) plan. This paper investigates the behavioral or emotional reasons at work among these non-participating employees, and what tools are available to best engage employees exhibiting these behaviors. It also looks at ways to increase the savings rates among those who already are participating in their plan.

"Behavioral" Barriers to Enrolling and Saving

High Discounting of the Future

One explanation for employees' contradictory savings behavior is the common preference for instant gratification, which undermines long-term savings plans. When given a choice, people usually prefer smaller payoffs now to larger payoff later. For example, the idea of a tasty hamburger today is often more compelling than the concern for long term cholesterol level. This tendency leads people to essentially disregard the future when it requires sacrifices from them now. With respect to retirement planning, people pursue short-term happiness at the cost of long term financial security. This "discounting" dynamic becomes hyperbolic as the future event approaches;[3] in other words, the further away a consequence is, the less influence it has on our decisions in the present.

Inertia/Procrastination

We may not think of inaction as a choice, but inertia really is a form of passive decision-making. And inertia, or procrastination, is one of the most pervasive behaviors blocking employees from reaching their retirement savings goals. People take the path of least resistance, even when they know taking action is in their best interest. In one large study, every non-enrolled employee who attended an educational meeting stated they intended to enroll. Of that group, only 14% actually followed through and enrolled. Intention is not the problem.[4] In another study, 68% of those participating in a retirement plan correctly stated that they were not saving enough. But only 4% of those actually took action over the next few months to improve their savings rate.[5] The same research found automatic enrollment and automatic contribution rate increase programs as successful low effort mechanisms to help employees make positive use of their natural tendency toward inertia.

[1] *U.S. Bureau of Labor Statistics 2003*
[2] *Turner and Verma (2007)*
[3] *Laibson, Repetto, Tobacman (1998)*
[4] *Choi, Laibson, Madrian, and Mettrick (2002)*
[5] *Choi, Laibson, Madrian, and Mettrick (2002)*

Lack of Financial Knowledge

If employees don't understand financial planning fundamentals, their consequent lack of confidence in their ability to understand elements of a retirement plan results in no action being taken to participate in the plan.[6] One survey rated only 43% of working Americans as having even attempted to calculate how much to save for retirement.[7] The good news is that increasing employees' financial knowledge positively affects the threshold decision of whether to contribute to a plan.[8] In addition, employees with higher self-assessed knowledge are more likely to invest in riskier assets, thereby improving their asset allocation. Recent research suggests creating targeted, ongoing educational programs are more effective than one-time seminars. Even so, education must be combined with tools to help retirement consumers actually change their behavior.[9]

Choice Overload

Even armed with financial knowledge, employees may still succumb to procrastination if the decision before them is complex. This is true of facing too many investment options. Intimidated, people tend to become more risk-averse and choose safer assets like money market funds (even when they are years away from retirement), or even shy away from participating in the plan. Research suggests that participation peaks at about 75% when two funds are offered, and then gradually declines to a low of 60% when 60 funds are offered.[10]

A powerful solution is to de-couple the participation decision from the contribution rate and asset allocation decisions. When either automatic enrollment (employees opt-out) or streamlined enrollment (employees opt-in) is used, employees can concentrate more on just the decision to participate. In both cases, the company has already chosen a default contribution rate and asset allocation, which employees tend to accept as investment advice on the part of the company.[11] In one company, a streamlined enrollment process tripled participation rates among new hires. And in two other companies using the same process, participation increased by 10 to 20 percentage points among existing non-participating employees.[12]

Loss/Regret Aversion

People will go to great lengths to avoid feeling regret about a decision – both before and after having made one. In fact, in weighing the prospect of a $1,000 gain against that of a $1,000 loss, people view the loss as hurting twice as much as the gain yields pleasure.[13] In other words, people are less likely to engage in behavior they are afraid may lead to a loss, even if there's a strong possibility of gain. The potential gains need to be much larger and more compelling than the potential losses. When it comes to savings decisions then, people can rationalize themselves into inaction instead of participating in a plan, contributing more, and diversifying assets into riskier investments. Even if plan participants overcome the first round of loss aversion hurdles, there is a tendency to hold onto poor performing investments to avoid feeling like they made a mistake.[14]

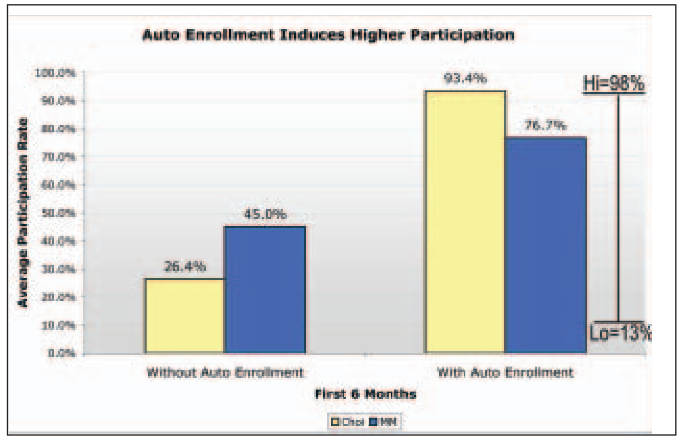
With so many compelling psychological arguments for inaction regarding savings, how can employers help their employees achieve their retirement savings goals? Ultimately, plan sponsors need to make saving simple, clear, and easy to act on – by applying the realities of behavioral economics (tendencies toward inaction) to actually help employees actively save. In particular, we focus on two necessary retirement behaviors: enrolling in the plan and setting an adequate savings rate.

[6] *Horack and Wood (2005)*
[7] *EBRI (2007)*
[8] *McCarthy and Turner (2000)*
[9] *Lusardi and Mitchell (2007)*
[10] *Iyengar, Jiang, Huberman (2003)*
[11] *Choi et al., Table 3 (2003)*
[12] *Choi et al., Table 3 (2003)*
[13] *Choi et al., Table 3 (2003)*
[14] *Mitchell and Utkus (2003)*

Tools for Enrollment

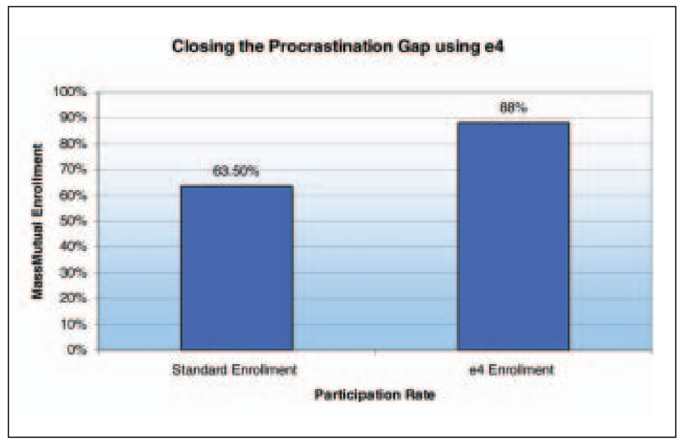
The section below outlines a few different solutions that use the principles of behavioral economics to increase participation.

Automatic Enrollment (AE) – Eligible employees need not act, and yet they still have the choice to opt out of the plan (which rarely happens). This tool is so effective that plan sponsors must choose default contribution rates and investment choices wisely – participants tend not to change either, taking the plan sponsor's default as an informed recommendation. For this reason, consider setting a moderately high default deferral of 7%, or use in conjunction with an auto deferral increase tool. In one MassMutual case, the default deferral set at 8% did nothing to dissuade a 96% participation rate.



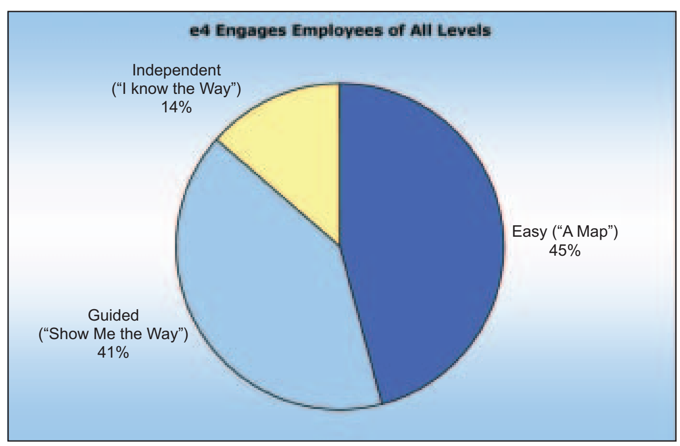
Note: Choi et al. sample = 2 cases, MassMutual sample = 199 cases

Meetings with *e*4SM – Though most eligible employees may plan on enrolling after attending an enrollment meeting, not everyone acts on the decision later. In MassMutual enrollment meetings using *e*4, each attendee uses a secure handheld device (pre-populated with participant and plan-specific data) that allows an interactive experience with enrollment, deferral choice, and asset allocation decisions. The immediate, dynamic process virtually eliminates decision delays, resulting in far more employees enrolling at the meeting. *e*4 has also been effective in getting employees to increase their savings rates.



Source: MassMutual company records (2007)

The *e*4 increases enrollments in part because it works well with all levels of employee knowledge about retirement saving. Based on responses to an interactive risk quiz, *e*4 then provides the employee with the appropriate level of guidance for establishing asset allocations. The technology, combined with the interactive dynamic of the meeting, can have a big impact on enrollment. Making meetings mandatory also helps.



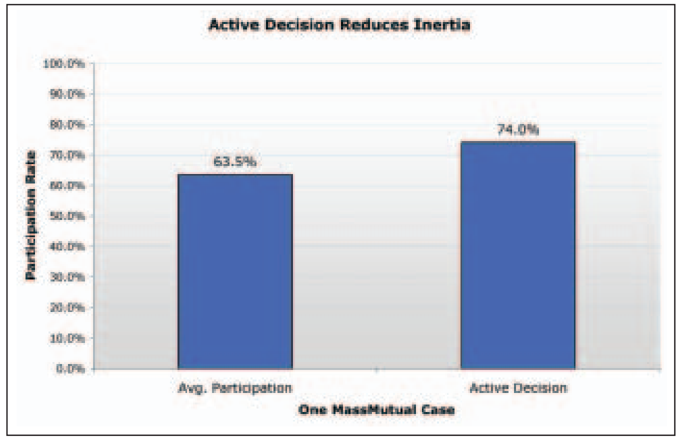
Source: MassMutual company records (2007)

Meetings with Active Decision Process – A deadline (non-binding) for returning the enrollment form nudges employees into action. Usually, employees are required to return the form along with their new hire paperwork. A shortened enrollment form makes the process easier, and managers advocating the plan in individual meetings can boost employee motivation to enroll. Especially effective with a default deferral rate and investment choice, it still forces an employee to think through the decision to decline enrollment. This can be particularly attractive to those plan sponsors who perceive automatic enrollment as too paternalistic.

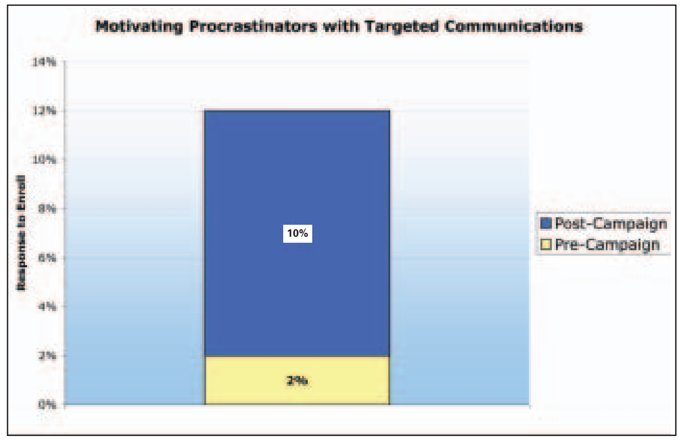
Making high enrollment an explicit management goal can also be effective. This policy makes it more likely that managers will engage employees in discussion of the plan and its benefits. Employees are more likely to appreciate the benefit and management will learn more about perceptions and needs.

Three-touch point campaign – Over three 25-day increments, this enrollment mail campaign targets newly eligible employees. Three separate mail pieces provide information on how to enroll (i.e., postcard, flyer, enrollment book). Designed to motivate procrastinators, this method increases the average enrollment rate among these non-enrollers an additional 10% beyond the number who would have responded without the campaign (2%).

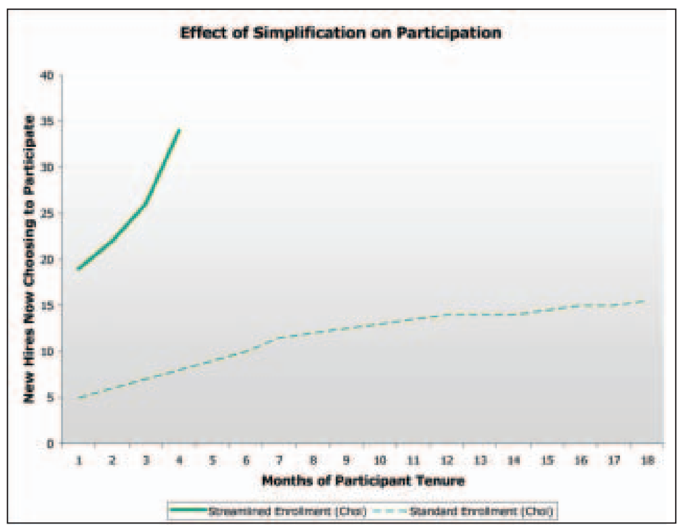
Express Lane[SM] campaign – Any degree of streamlining the enrollment process seems to yield significant positive results – both for newly eligible employees as well as those eligibles who had been previously solicited. MassMutual's streamlined enrollment option requires only that eligible employees decide to participate via a tear off, postage-paid card. The plan sponsor reduces the complexity of the savings decision by already deciding the default fund and contribution rate (listed on the card). This method yields a response rate of nearly 10% among those previously non-participating employees, compared to a 1% response rate from a three-touch point campaign simply reminding the same group to enroll. As a frame of reference, standard enrollment methods with no education or additional communication yield response rates of about 2% among newly eligible employees. Express Lane[SM] can be used as a standalone piece to target non-participating employees, or as part of an overall enrollment process. In either situation, simplifying the enrollment process yields significant results.



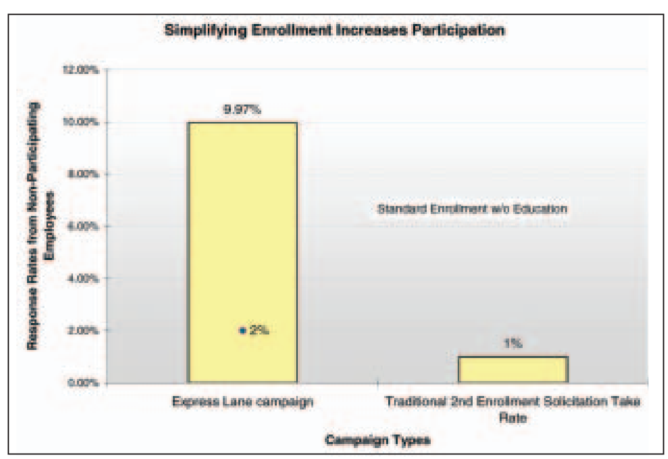
Source: MassMutual company records (2007)



Source: MassMutual company records (2005 - 2006)



Source: Choi et al. (2005) NOTE: Study effects on newly eligible employees



Source: MassMutual company records (2007). NOTE: Responses from campaigns targeting those employees previously solicited.

Tool Effectiveness in Addressing Employee Inaction to Save for Retirement

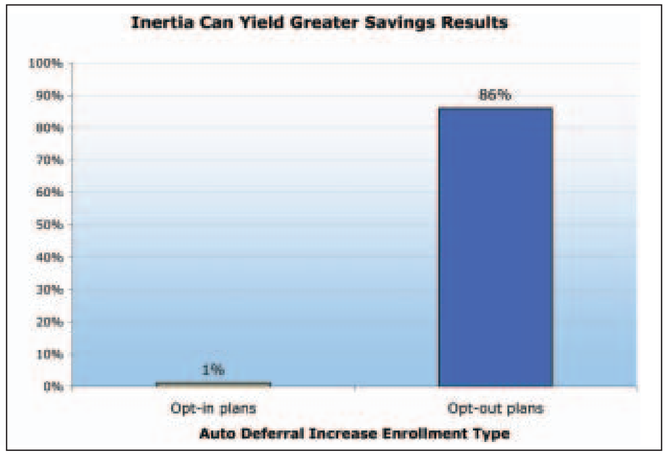
Barrier:	High Discounting	Inertia / Procrastination	Not Knowledgeable	Choice Overload	Loss / Regret Aversion
Enrollment Solutions (in order of effectiveness)					
Auto-enrollment	High	High	High	High	High
*e*4 Meeting	Medium	High	High	High	Medium
Regular meeting	Medium	Low	Medium	Low	Medium
Active Decision (see page 4)	Low	Medium-High	Low	Low	Low
Active Decision (w/ easy enrollment)	Low	Medium-High	High	High	High
Three touch point campaign*	Medium	Medium	Medium	High	Medium
Express Lane℠	Low	Medium	High	High	High
Savings Solutions (in order of effectiveness)					
Auto-deferral escalation	High	High	High	High	High
Gap statement	High	Medium	Low	Low	Low
Increase deferral campaign	Medium	Medium	High	High	High
Retire-ready campaign	High	Low	High	Low	High

** Results from the three touch-point campaign and Express Lane℠ are similar.*

Tools for Saving

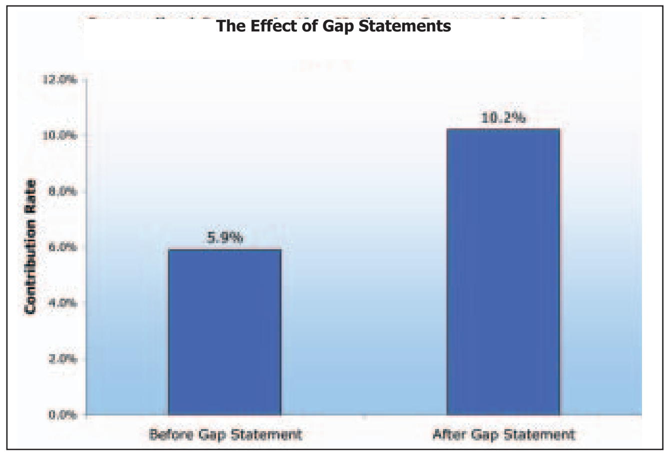
This section outlines some tools that use the principles of behavioral economics to encourage increased savings rates.

Auto Deferral Increase (ADI) – Programs where participants choose to automatically increase their contribution rates (concurrent with their pay raises) tend to result in higher average contribution rates than those programs where participants (after receiving advice to save more) must take action to increase their rates. MassMutual has found that inertia can be a powerful ally when employees are automatically enrolled (with an opt-out option) in the auto deferral increase program soon after initial enrollment in the overall plan.



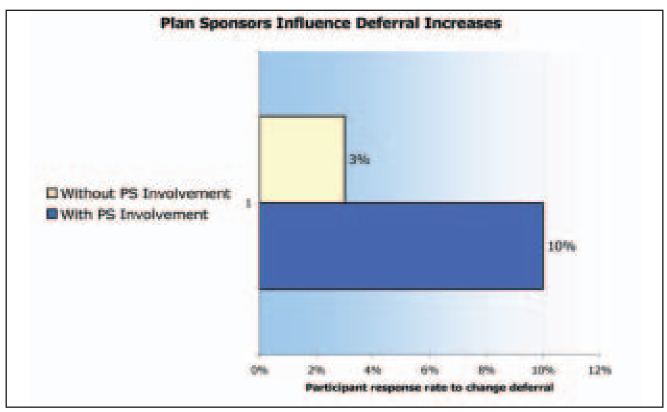
Source: MassMutual company records (2007). NOTE: New Service, represents 7 cases, totaling 755 participants

Gap Statement – Communicating in graphic, personalized terms sends a strong and relevant message to participants about what their projected gaps will be between targeted retirement savings and projected assets at retirement, based on today's contribution rate. When combined with a simple tear-off postcard to increase participants' deferral rates, this method can yield up to a 12% response rate. Even considering that some participants may decide to lower their contribution rate, the net average deferral rate still increases by nearly 2 percentage points.



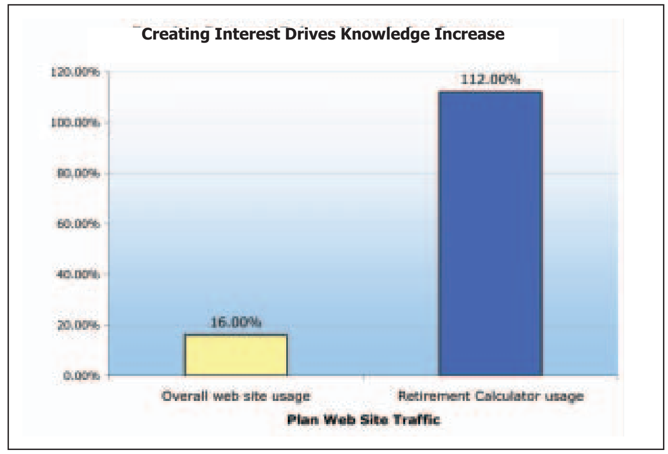
Source: MassMutual company records (2007). NOTE: Data represents contribution rate change only among those who chose to increase.

Increase Deferral Campaign – Through a 25-day direct mail campaign and targeted messages on the plan web site, participants receive messages about the importance of retirement savings and the value of increasing deferral rates. Using an easy response, tear-off postcard makes it easy to respond. Plan sponsors can play an influential role in encouraging participants to respond and increase their contribution rates – roughly tripling the response rate if the plan sponsor is involved, compared with no plan sponsor involvement.



Source: MassMutual company records (2007)

Retire-Ready Campaign – A three-touch point direct mail campaign (over 25-day increments) raises awareness about the need to analyze their preparedness for retirement. Appealing especially to those with high interest but low knowledge, the campaign motivates participants to engage in web-based tools to plan for retirement, identify savings gaps, and provide options for increasing deferral rates. MassMutual data indicates that 22% of those participants targeted visit the retirement calculator web tool during the campaign.



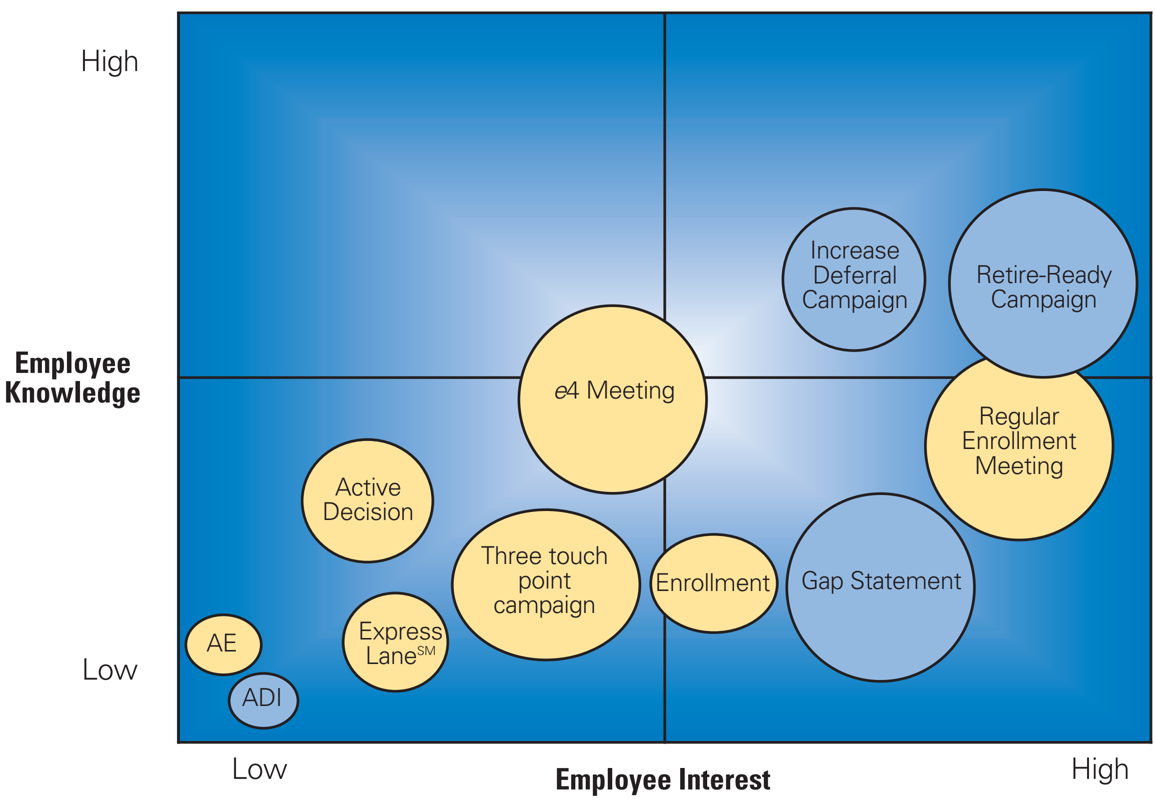
Meetings with *e*4℠ – The immediate, dynamic process that helps increase enrollment can also be used to help increase savings rates. Participants can make quick changes to their deferral rates and increase their savings. Between thirty and forty percent of participants at an *e*4 meeting take action and increase their deferral rates. This number can be as high as sixty percent, especially if a sponsor is actively engaged in the campaign to increase savings.

Conclusion

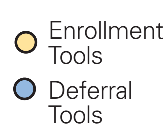
For over two decades, employers have sought to put more power into the hands of their employees through DC retirement plans. Ironically, employees are subject to several behavioral biases that interfere with rational economic decision-making, often squandering the very power to achieve their retirement savings needs. Evidence is mounting that plan sponsors can exert tremendous positive influence over most of their employees' savings decisions by employing, instead of fighting these behavioral biases – through the framing of decisions regarding enrollment, contribution rate, and asset allocation. A variety of tools, both at the plan design level and on an ad hoc basis, offer effective means for helping employees along their journey toward retirement.

Employee Time Investment/Commitment Required

(Bubble size represents the amount of employee time needed to respond to each tool)



For example, if an employer has a base of participants who have low levels of knowledge and low levels of interest (bottom left of chart), automated solutions including enrollment and deferral increases require little time investment on the part of the participant while achieving the goals to enroll and save.



Sources

Benartzi, Shlomo and Richard H. Thaler. 2004. "Save More Tomorrow." *Journal of Political Economy*, 112(1) February 164-187.

Choi, James J. and David Laibson and Brigitte C. Madrian and Andrew Metrick. 2002. "Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance." Pension Research Council Working Paper 2002-3.

Choi, James J. and David Laibson and Brigitte C. Madrian. 2005. "Reducing the Complexity Costs of 401(k) Participation through Quick Enrollment™."

Employee Benefit Research Institute (EBRI), 2007. "2007 Retirement Confidence Survey."

Horack, Sarah and Andrew Wood. 2005. "An Evaluation of Scheme Joining Techniques in Workplace Pension Schemes with an Employer Contribution." Department for Work and Pensions Research Report No. 292.

Iyengar, Sheena S. and Wei Jiang and Gur Huberman. 2003. "How Much Choice Is Too Much: Determinants of individual contributions in 401K retirement plans" In Mitchell, O.S. & Utkus, S.P (Eds.) *Developments in Decision-Making Under Uncertainty: Implications for Retirement Plan Design and Plan Sponsors.* Oxford University Press, Oxford, England.

Laibson, David I. And Andrea Repetto and Jeremy Tobacman. 1998. "Self-control and Saving for Retirement." *Brookings Papers on Economic Activity*, Vol. 1998. No. 1. , pp. 91-196.

Lusardi, Annamaria and Olivia S. Mitchell. 2007. "Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education Programs." Pension Research Council Working Paper.

Madrian, Brigitte C. and Dennis F. Shea. 2000. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." National Bureau of Economic Research Working Paper 7682.

McCarthy, David D. and John A. Turner. 2000. "Pension Education: Does It Work? Does It Matter?" *Benefits Quarterly*; First Quarter 2000: 64-71.

Mitchel, James O. and R. James Holzworth. 2005. "Behavioral Economics: Literature Review and Implications for Financial Services." A LIMRA report.

Mitchell, Olivia and Stephen Utkus. 2003. "Lessons from Behavioral Finance for Retirement Plan Design." Pension Research Council Working Paper 2003-6.

Turner, John A. 2006. "Designing 401(k) Plans That Encourage Retirement Savings: Lessons from Behavioral Finance." *Benefits Quarterly*; Fourth Quarter 2006: 24-35.

Turner, John A. and Satyendra Verma. 2007. "Why Some Workers Don't Take 401(k) Plan Offers: Inertia vs. Economics." Center for Research on Pensions and Welfare Policies Working Paper 56/07.

Authors

Alison Salka, Ph.D., Director of Behavioral Communication and Participant Research.

Ian Sheridan, Corporate Vice President, Chief Marketing Officer, MassMutual Retirement Services Division.

Contributors

Marsha Whitehead, 2nd VP National Account Communications and Behavioral Communications.

This white paper was written in collaboration with the MassMutual Center for Behavioral Research℠. The Center is dedicated to understanding the dynamics of financial decisions and behavior in order to provide innovative retirement solutions to improve retirement outcomes. Our highly trained team of thought leaders conducts research and analysis in collaboration with academic and industry researchers. Our insights and information are shared for the benefit of sponsors, participants and financial professionals.

We experiment endlessly and fearlessly test new ideas in our efforts to help the American worker successfully retire.

To learn more about MassMutual's retirement education and programs, please contact your MassMutual Retirement representative or plan advisor. You can also reach us at 1-877-333-4356. www.massmutual.com/retire

MassMutual
FINANCIAL GROUP®

Massachusetts Mutual Life Insurance Company
and affiliates, Springfield, MA 01111-0001

www.massmutual.com

Securities offered through registered representatives of MML Investors Services, Inc., 1295 State Street, Springfield, MA 01111.

MassMutual Financial Group is a marketing designation (or fleet name) for Massachusetts Mutual Life Insurance Company (MassMutual) and its affiliates.

RS3644 1107
C:12826-00