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Closing America's Retirement Savings Gap: Nudging Small Business Owners to Adopt Workplace Retirement Plans

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Closing America's Retirement Savings Gap: Nudging Small Business Owners to Adopt
Workplace Retirement Plans

by

Peter W. Kirtland

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Business Administration
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Muma College of Business
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DEDICATION

This research is dedicated to all the employees and sub-contractors of America's small employers who do not currently have access to a workplace retirement plan. All working Americans should have the ability to save for retirement through a workplace retirement plan that utilizes payroll deduction as the means to fund the program. Through broad based education, we can eradicate the coverage gap that exists today, allowing millions more Americans to retire with dignity.

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ABSTRACT

Small businesses, with 50 or fewer employees, rarely offer workplace retirement plans. The lack of effective retirement plan options leads to employee stress, financial strain, and social instabilities. The purpose of this research is to study why small business owners make poor decisions about workplace retirement plans. The study evaluates the information supply chain and determines that financial advisors are a critical information delivery mechanism. However, they do not take the time to discuss the various retirement plan options available with the small business owners which leads to lack of plan adoption.

Elaborated Action Design Research (eADR) research methods are used to diagnose the problem as well as to design and implement two artefacts that have potential to increase retirement plan adoption rates in small businesses. Data are collected through interviewing industry experts and small business owners in the diagnosis phase, and small business owners in the design and implementation phases.

Two innovative artifacts are designed to improve the quality of information provided to small business owners. The artifacts are applied via interview interventions with ten owners. An elicitation script gathers information from the owner to support a decision model that produces an adaptive default nudge indicating a preferred workplace retirement plan for the business. The results of the study indicate a significant increase in awareness of retirement plans and an intention to adopt the retirement plan presented as the default nudge.

This research contributes to research on small business retirement by demonstrating the information gap faced by small business owners and the potential of effective nudging strategies

to increase awareness of retirement plan options and to increase adoption of effective employee retirement plans. Limitations on this research include sample size and geographic diversity of the group of small business owners interviewed.

CHAPTER ONE:

INTRODUCTION

American workers are suffering from a severe financial savings crisis. Several factors work in concert to exacerbate this crisis, including rising healthcare costs, escalating life spans, and the long-term viability of the Social Security system. Taken together, these factors create a recipe for an epidemic of personal insolvency, putting major financial strain on our local, state, and federal governments.

Our nation's retirement system is supported by three pillars: Social Security, personal savings, and corporate retirement plan savings. It is estimated that by the year 2035, Social Security will be depleted to the point that it can only pay 75% of its claims (GAO, 2017).

Another of the three pillars, corporate retirement plan savings, has come up woefully short. In fact, approximately 55 million working Americans do not have the opportunity to save in a workplace retirement plan (CRI, 2018). Studies show a drastic difference in adequate retirement savings between employees with access to a workplace retirement plan and those who do not have access to a workplace retirement plan. In fact, 71% of employees who participate in a workplace retirement plan are somewhat confident in their retirement versus just 33% who do not have access to a workplace plan (EBRI, 2017). Workers who participate in a retirement plan are 10 times more likely to be saving for retirement (71% vs. 7%) (EBRI, 2017). In fact, the AARP, (formerly the American Association of Retired Persons), stated that individuals are 15 times more likely to save for retirement when they have a way to save through payroll deduction (CRI, 2018). Workers who participate in a retirement plan also report having significantly more

saved for retirement than those without access to a plan. More than 67% of those not participating in a plan report having less than \$1,000 saved for retirement (not including primary residence) versus just 9% of those who participate in a retirement plan (Figure 1).

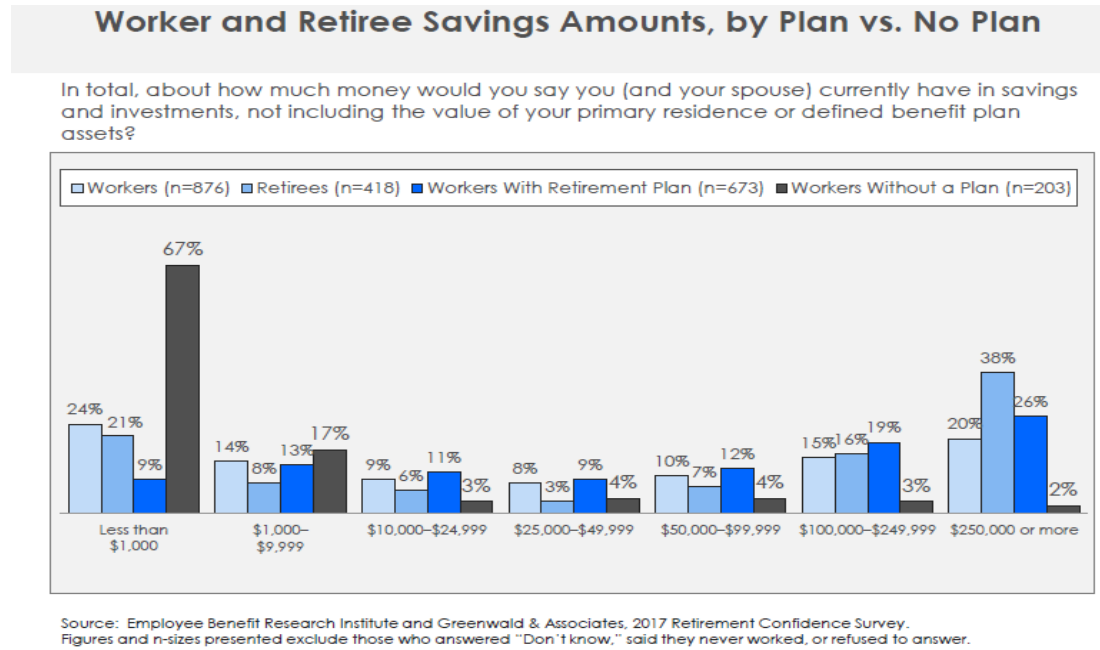


Figure 1. Worker and Retiree Savings Amounts, by Plan vs. No Plan

Figure 1 makes it clear that access to a workplace retirement plan drives significantly better savings outcomes than not having access to a workplace retirement plan.

A major contributor to the savings crisis is the reality that only 33% of small business owners offer their employees a workplace retirement plan (GAO, 2017). Thirty three million people work for small businesses, which are businesses with 50 or fewer employees (GAO, 2017).

In another study, 37% of small business owners stated the number one reason for not offering a retirement plan is cost while 28% asserted it is a drain on administrative resources (The PEW Charitable Trusts, 2017). These statistics beg the questions, *how do we encourage*

more small business owners to offer retirement plans? Is it the information we present? Is it how we present the information? Or perhaps, is it that the information is never presented?

Unfortunately, the lack of retirement savings wreaks havoc on the employee by driving financial stress, which leads to higher health care premiums, turnover, absenteeism, errors, accidents, theft, overall disengagement at the workplace, and numerous other negative outcomes. In addition, there is significant cost to the employer. In fact, the associated decline in worker productivity is pegged at 20% of wages (Garman et al., 1996). Therefore, for a person making \$30,000 a year, the productivity decline represents a cost of \$6,000 a year to the employer.

The goal of this research is to change the behavior of small business owners through the creation of artefacts that would “nudge” the small business owner into making better decisions related to adopting a workplace retirement plan. The ultimate outcome is to arm tens of thousands of financial advisors with a new way to engage small business owners to significantly increase the likelihood of plan adoption.

The stakeholders impacted by this research are employees, employers, governments (local, state, and federal), and service providers in the supply chain, including financial advisors, custodians, record-keepers and, in some cases, the third-party administration firm. The savings problem is clearly a mainstream problem when it shows up in the Dilbert comic strip (see Figure 2).



Figure 2. Dilbert Explains the Coverage Gap (see Appendix I for permission use)

Motivation

My motivation for this research is to improve retirement savings outcomes for employees of small businesses by educating financial advisors and arming them with new tools and methods to create a scalable, profitable model to work with small businesses.

An adage in the retirement plan business states “small plans are sold, not bought.” This statement simply implies that small business owners rarely take the initiative to look for a workplace retirement plan solution.

Research Questions and Hypothesis

I interviewed two industry professionals and three small business owners to gain perspective on the reason small business owners have such a high rate of not having a workplace retirement plan. The interview subjects agreed that small business owners do not receive the same amount and quality of information as larger employers and further stated that financial advisors, who are the main providers of this information, intentionally do not engage with the small business owner, leaving a void of information about workplace retirement plans. The research questions and hypotheses for this study are below:

RQ1: Why do small business owners not adopt workplace retirement plans?

H1.1: There is information asymmetry between small business owners and financial advisors.

H1.2: This information asymmetry exists because financial advisors are not talking to small business owners. Financial advisors are not talking to small business owners because they feel they cannot make enough money servicing a retirement plan with a small business.

I designed two artefacts that educate the small business owner about workplace retirement plans, replacing the financial advisor in the information supply chain. This information delivery is designed to be quick and concise.

RQ2: How can decision-making artefacts based on nudging theories be designed to effectively persuade small business owners to adopt a workplace retirement plan?

H2.1: An artefact using nudges, such as default and disclosure, can be used to engage small business owners and persuade them to adopt workplace retirement plans.

In the artefact design, once I inform the small business owner, I introduce a new artefact that gathers information about their situation and defines a “best-fit” retirement plan solution. They then choose the plan (or no plan) they feel makes the most sense for them. This nudge persuades them to make better decisions, giving them comfort in the decision they make.

RQ3: How would one build and evaluate an artefact with built-in nudges used to drive up retirement plan adoption for small business owners?

H3: By making the default nudge *adaptive*, so they are customized to the specific situation of the small business owner, the small business owner is more likely to act on the “advice” of the nudge because they feel as if they have been counseled.

Contributions

To address these research questions, this dissertation performs Action Design Research in a real-world environment where I interact with small business owners as stakeholders to design, test, and evaluate nudges that would demonstrate higher retirement plan adoption rates in this population. This research is done through the use of an elicitation script, education through disclosure followed by an Adaptive Default Nudge used to recommend the appropriate retirement plan type.

My general contributions are the design of artefacts to result in better small business owner behavior. This result will lead to changes in policy and practice to drive better savings outcomes.

CHAPTER TWO: LITERATURE REVIEW

A mountain of research exists on the financial savings crisis in the United States, covering topics such as potential future challenges with social security funding, the retirement coverage crisis, and the personal financial stress that is a byproduct of this crisis. However, there is little research on how to solve the coverage crisis with non-governmental interventions used to interact with small business owners in a way to drive higher workplace retirement plan adoption.

Status Quo Bias (Inaction Inertia)

In trying to determine what might cause the inertia of a small business owner not taking the action required to adopt a workplace retirement plan, papers related to Status Quo Bias, also referred to as Inaction Inertia, were reviewed. One paper stated that “Inaction inertia occurs when bypassing an initial action opportunity has the effect of decreasing the likelihood that subsequent similar action opportunities will be taken” (van Putten, et al., 2013). The paper stated, “Once someone commits to an action, they are more likely to stick with it. The same is true about inactions.” This statement suggests that if a small business owner consciously decides to not pursue adopting a workplace retirement plan, some type of “nudge” is required to persuade them to take an action, thereby overcoming Inaction Inertia.

Soft selling is discussed in the context of overcoming Status Quo Bias, where a common method of overcoming is using trial periods with no obligation to purchase (Samuelson & Zeckerhauser, 1988). This strategy could apply by informing the small business owner that supporting a payroll deduction Individual Retirement Account (IRA) can be discontinued at any

time without cost or penalties. They also state the cost associated with Status Quo Bias is the welfare loss stemming from not making a decision, in this case the unfunded retirement account of the employee and the potential costs associated with personal financial stress driven from this outcome. A major driver of Status Quo Bias is loss aversion, which could be driven by the small business owners thinking the only type of retirement plan available is the 401(k) plan. The authors describe what Thaler refers to as the Endowment Effect, when loss aversion drives the decision maker to no decision. The authors also describe various categories of Status Quo Bias, including rational decision making (which says the average person will make the same decision as before when presented with the same set of options), which begs the question if additional plan types (i.e., a payroll deduction IRA and SIMPLE IRA) are presented to the small business owner, would they be more likely to overcome Status Quo Bias.

Table 1. Status Quo Bias

Concepts	Key Findings	Reference
Inaction inertia	<ul style="list-style-type: none"> When bypassing an initial action opportunity has the effect of decreasing the likelihood that subsequent similar action opportunities will be taken. 	Van Putten, et al, 2013
Endowment Effect Loss Aversion	<ul style="list-style-type: none"> When Loss Aversion drives decision makers to make no decision at all. This may be relevant in that the number one reason small business owners choose not to adopt a workplace retirement plan is cost. Defined as an individual's preference to avoid loss to acquiring an equivalent gain. Therefore, small business owners may think the gain of putting in a plan is equivalent to the loss (cost) of revenue for the company and choose not to do anything, or inaction inertia. 	Thaler, Sunstein, 2009
Soft selling	<ul style="list-style-type: none"> Method to overcome status quo bias, using trial periods with no obligation to purchase. 	Samuelson, Zeckerhauser, 1988

Private Sector Interventions Using Nudges

With 30 years of industry experience, I am not aware of nudges being used to increase retirement plan adoption with small business owners within the private sector. I searched within the University of South Florida (USF) library and did not find any research on nudge-based

private sector interventions designed to drive higher adoption of workplace retirement plans for small business owners.

I searched the USF library using the ABI/Inform database using the following criteria:

- "small business owner" and "nudge" and "retirement plan," which yielded two results, neither of which are germane to this research.
- "using nudges" and "increase(d) plan adoption," which yielded no results.
- "using nudges to increase plan adoption," which yielded no results.

Retirement Plans as a Retention/Attraction Tool

Retirement plans are important tools for attracting and retaining employees, although some wonder if the same holds true for small businesses. Eighty-five percent of small business owners who offer a retirement plan said it helps their recruitment and retention efforts (Seol, 2001). Another 85% said that offering a retirement plan helps employee attitude and performance (Seol, 2001). This statistic was relevant for developing a “hook” to persuade small business owners to participate in the study.

Table 2. Retirement Plans as Attraction/Retention Tool

Concepts	Key Findings	Reference
Social Norms Status Quo Bias Loss Aversion	<ul style="list-style-type: none"> • Defined as a behavioral tendency whereby individuals tend to follow others and seek approval. This behavior is often targeted when developing nudges. • Strong tendency of individuals to remain in the current state, as potential disadvantages associated with leaving the current state are perceived to be greater than the potential benefits. Correlated with Loss Aversion. • The losses and disadvantages that may result from a decision are weighed more heavily than are gains and benefits. Individuals tend to avoid risks, even when potential for gain is greater. 	Jung, et al, 2018 Sunstein, 2014
Competitive Edge	<ul style="list-style-type: none"> • 85% of small business owners who offered a retirement plan said that offering a plan helped their recruiting and retention efforts, which could be extremely relevant when considering the effects of Social Norms on decision making. 	Seol, 2001

Table 2 (Continued)

Concepts	Key Findings	Reference
Employee Engagement	<ul style="list-style-type: none"> One study showed that 85% of small business owners felt that offering a workplace retirement plan improved employee attitude and performance. 	Seol, 2001

Personal Financial Stress

Personal finances are the number one stressor for relationships, work, health and crime/violence; 70% of absenteeism is the result of stress-induced illness, and the total losses nationally related to job stress is \$150 billion (Garman et al., 1996).

The lack of access to a workplace retirement plan ultimately hurts the small business owner through the effects of personal financial stress. The effects can include absenteeism, theft, accidents, errors, turnover, higher health care costs, and higher salaries as the result of employees having to work longer before they can retire.

Of the five risk stressors in life, (relationships, work, health, crime/violence, and personal finance), personal finance is rated as the number one source of stress; concerns about personal stress are five times of those regarding health (Garman et al., 1996). Alleviating financial stress caused by inadequate retirement savings will reduce the overall loss caused by lack of employee engagement.

Table 3. Personal Financial Stress

Concepts	Key Findings	Reference
Financial Stress	<ul style="list-style-type: none"> Defined as “a condition that is the result of financial and/or economic events that create anxiety, worry, or a sense of scarcity, and is accompanied by a physiological stress response” 	http://www.financialhealthinstitute.com
Pervasiveness	<ul style="list-style-type: none"> Most common stressor, over relationships, work over work health and crime/violence. 70% of absenteeism is the result of stress induced illness. Total losses nationally are measured at \$150 billion. 	Garman, et al 1996

Nudging and Digital Nudging

“Nudging” is a behavioral economics concept made famous in a seminal book by Richard Thaler and Cass Sunstein (2009). A Nudge refers to “Choice Architecture,” or the way we present choices in order to drive individuals to make the best choice for themselves that they might not otherwise make if the choice is more random. A simple example is putting the healthy food at the beginning of the cafeteria line led students to eat healthier. They still had the same choices, just presented differently. This concept is also known as Libertarian Paternalism. Preserving freedom of choice is one of the key tenets of nudging.

Nudges also can be delivered digitally. Five examples of digital nudges are Status Quo Bias, Social Norms, Loss Aversion, Anchoring and Adjustment, and Hyperbolic Discounting (Jung, et al, 2018), as illustrated in the Table 4.

Table 4. Nudging/Digital Nudging

Concepts	Key Findings	Reference
Nudge	<ul style="list-style-type: none"> Defined as liberty-preserving approaches that steer people in a particular direction. 	Sunstein, 2014
Libertarian Paternalism	<ul style="list-style-type: none"> Adding the word Libertarian to Paternalism simply means liberty-preserving. 	Sunstein, Thaler, 2003
Choice Architecture	<ul style="list-style-type: none"> Design of environments in order to influence decisions. 	Goldstein et al, 2008
Default	<ul style="list-style-type: none"> Defaults are considered by many as one of the most effective nudges. Examples include automatic enrollment into health and retirement programs. In Germany where organ donation is opt-in, there is 12% participation. In Austria where it is opt-out (i.e. default), participation is 99.98%. Choosing the right default increases customer satisfaction and profitability. Mass defaults cannot be customized for the individual. One example would be the shipping default of a purchase, such as “standard.” Personalized defaults can be customized for the individual based on some pieces of information provided by the individual and serve as an advisor. 	<p>Sunstein, 2014</p> <p>Goldstein et al, 2008</p>
Ease of Use	<ul style="list-style-type: none"> Examples are making low cost options or healthy foods visible. 	Sunstein, 2014

Table 4 (Continued)

Concepts	Key Findings	Reference
Social Norms	<ul style="list-style-type: none"> Emphasizing what most people do. Showing people what others are doing has proven to be one of the most effective nudges. In many cases, it is actually more effective to highlight what people <i>think</i> other people do versus what they actually do. Another example is Amazon displaying “customers who bought this also bought...” 	<p>Sunstein, 2014</p> <p>Jung et al, 2018</p>
Disclosure	<ul style="list-style-type: none"> Disclosure policies can be highly effective if information is highly accessible and comprehensible, but simplicity is exceedingly important. This can be leveraged when comparing a 401(k) plan to a Payroll Deduction IRA arrangement. 	<p>Sunstein, 2014</p>
Hyperbolic Discounting	<ul style="list-style-type: none"> People value present option more than future options even if the future option is of more value. When people’s pictures were artificially aged, they became “connected” with their future selves. In doing this, they elected to contribute twice as much to a retirement plan as those who did not have this done. 	<p>Jung et al, 2018</p> <p>Benartzi, 2015</p>

Information Asymmetry

The employer’s knowledge of retirement plans typically is acquired through a sales process, where a financial advisor or other service provider within the retirement plan services ecosystem tries to convince employers that they need a workplace retirement plan. Information asymmetry occurs when one party to a transaction has substantially more information than the other party; it this takes place with small business owners because financial advisors do not engage small business owners with the intent of selling a retirement plan. There is little to no compensation for advisors because they bill their fees as a percentage of assets, so when there are no assets, there are no fees.

In a paper regarding ERISA Regulation 408(b)(2), it is stated the market for retirement plans is characterized by acute information asymmetry (Buckley, 2011); 408(b)(2) is designed to provide fee disclosure for service providers in a unified manner, more easily allowing employers to fulfill their fiduciary obligations, one of which is to make sure the retirement plan fees are fair

and reasonable. This information void is far more prevalent with small businesses for the reasons mentioned above.

Table 5. Information Asymmetry

Concepts	Key Findings	Reference
Market Destruction	Often the “bad” can drive out the “good,” leaving no market at all	Akerlof, 1970
Prevalence in Retirement Industry	Information asymmetry identified as “acute” in the retirement industry	Buckley, 2011

The review of literature clearly demonstrates a major savings crisis that is in large part driven by insufficient retirement savings by employees of small businesses. This lack of retirement savings drives personal financial stress, and personal financial stress drives employee disengagement, which is extremely costly.

I was not able to find any literature examples of broad based efforts to educate small business owners about retirement plans or introduce any type of intervention to drive retirement plan adoption with small business owners. My research closes this gap, taking what was learned through the literature review and using elaborated Action Design Research to introduce two artefacts that Nudge small business owners to adopt workplace retirement plans.

CHAPTER THREE: RESEARCH METHODOLOGY

I researched the problem of the lack of retirement savings, which is driven largely by the failure of small business owners to adopt workplace retirement plans. The typical flow of information in a retirement plan ecosystem with key stakeholders takes place as illustrated in Figure 3 below.

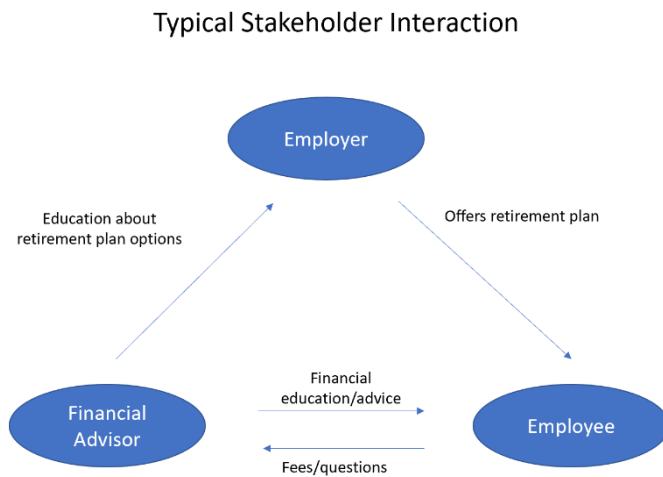


Figure 3. Typical Stakeholder Interaction

Employers are educated about their retirement plan options through interactions with a financial advisor. The financial advisor works with employers to find the type of retirement plan that helps them accomplish their objectives. Then, the employer adopts a plan and makes it available to employees. The financial advisor comes to the employer’s work site to educate and enroll employees into the plan. The financial advisor is compensated through fees deducted

from participant accounts. For this fee, the participants pose questions to the financial advisor and receive investment advice.

This flow of information does not exist with small business owners. My Hypothesis H1.1 states the information asymmetry is driven by an information void unique to small business owners. My Hypothesis H1.2 asserts the information asymmetry is the result of the person who usually educates businesses about workplace retirement plans not interacting with small business owners.

My research started with a thorough diagnosis of the problem space, which included interviewing three small business owners and two industry experts. Then, I designed two artefacts that were used to gather specific information about the small business owner, educate them on their retirement plan options, and persuade them to make a better decision given this new information. I accomplished this result by interviewing small business owners and educating them on workplace retirement plan options available to them, filling the information void left by the financial advisor.

Action Design Research was used for this study since it is the most suitable approach that supports the diagnosis of the problem space followed by the design, testing, and implementation of my artefacts. The ability to diagnose, test, and implement through iterative cycles made Action Design Research an ideal fit for this research topic.

As stated in the paper *An Elaborated Action Design Research Process Model* (Mullarkey & Hevner, 2019), four primary cycles are in eADR (see Figure 4 below), including Diagnosis, Design, Implementation, and Evolution. Within each cycle is identification of the problem, the creation/modification of the artefact, evaluation of the artefact, reflection, and learning.

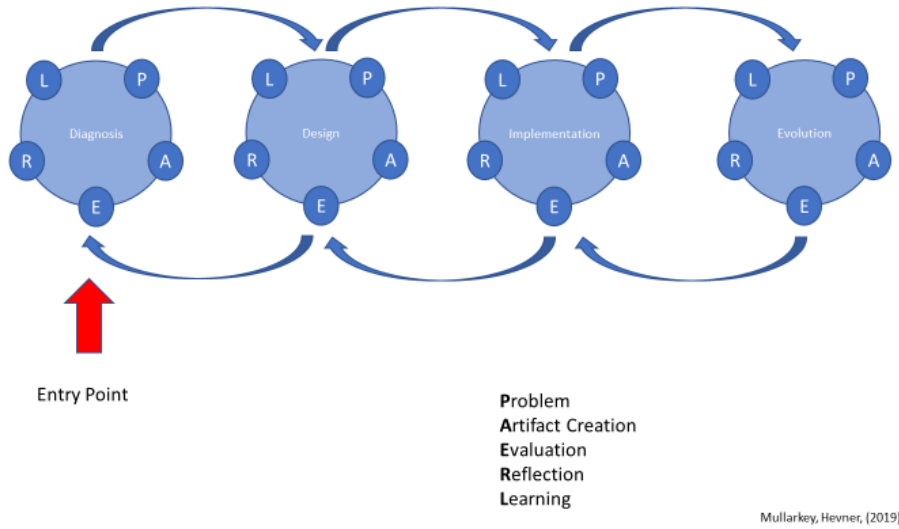


Figure 4. eADR Lifecycle Framework

For my research, I focused on the Diagnosis, Design, and Implementation cycles. The Evolution Cycle is addressed in the Future Research section of the paper. The entry point for the process can begin in any of the stages; the entry point for most designs is the Diagnosis phase, as was the case with this research. The problem addressed in the Diagnosis Phase is not enough small business owners offer workplace retirement plans.

Diagnosis Cycle

Table 6. eADR Diagnosis Cycle

Diagnosis Cycle	Description of Activity
Problem	The problem is identified as small business owners not adopting retirement plans. I examine why larger employers are adopting plans at a significantly higher rate than small employers.
Artefact Creation	Identification and evaluation of the problem space, which is the information void or information asymmetry, that exists with small business owners.
Evaluation	Through the evaluation phase, I determine the void of information is caused by financial advisors not interacting with small business owners, leaving a void in knowledge.
Reflection	In the reflection process, I determine the reason that advisors do not engage with small business owners is because they feel they cannot do it profitably.
Learning	While discussing retirement plan options with three small business owners during the interviews in the diagnosis phase, I learn that I can educate small business owners quickly, filling the void left by financial advisors.

The Diagnosis Cycle started with a thorough evaluation of the problem space. I combined my 30 years of experience in this industry with a literature review and ended with interviews of three small business owners and two industry experts. The literature review focused on the Status Quo Bias, information asymmetry, the damage caused by the lack of retirement preparedness then explored the behavioral effect of nudges to demonstrate it is a very viable solution if used appropriately. Table 6 above describes each phase within the Diagnosis Cycle.

The learnings from the Diagnosis Cycle were used to design two artefacts that were tested in a live environment with small business owners to determine if it improved the adoption rates of workplace retirement plans.

Design Cycle

Table 7. eADR Design Cycle

Design Cycle	Description of Activity
Problem	The problem is now advanced to an information void, or information asymmetry that exists with small business owners.
Artefact Creation	Creating two artefacts that will be used together to persuade small business owners to adopt workplace retirement plans.
Evaluation	Providing small business owners with some information on their retirement plan options will lead them to overcome status quo bias and choose a plan option to adopt.
Reflection	Adding an adaptive default nudge (suggestion) to a disclosure nudge (education) will give small business owners comfort in their selection.
Learning	By making this process quick and easy to navigate, small business owners will be eager to participate in the process.

Using the reflections and learnings in the Diagnosis Cycle, I designed two artefacts that were used as part of an interview process with small business owners to test whether these artefacts resulted in higher than normal plan adoption rates. The first artefact was comprised of an elicitation script where I asked general questions about their business, followed by a basic chart that explained three types of retirement plan options, including a 401(k) plan, a SIMPLE IRA, and a Payroll Deduction IRA, followed by seven polling questions about how they thought

about certain aspects of retirement plans, including costs and how much time they were willing to dedicate to administer.

The second artefact was one polling question that asked participants, given their new knowledge, which plan type would they select, and explained that based on their answers, one plan type was recommended. I further explained that they did not need to pick the option that was preselected. Table 7 above briefly describes each phase of the Design Cycle.

Implementation Cycle

Table 8. eADR Implementation Cycle

Implementation Cycle	Description of Activity
Problem	Small business owners identify attracting and retaining employees as one of their biggest challenges and think retirement plans are too expensive and take too much effort to maintain.
Artefact Creation	The combination of two artefacts designed to ask questions, educate, and make recommendations has proven to be an effective means of persuading small business owners to adopt workplace retirement plans.
Evaluation	The adaptive default nudge proved to be powerful in its ability to make the small business owner feel consulted and advised.
Reflection	There are extraneous factors regarding employee demographics that should be taken into consideration when creating a more broad-based solution. One would be independent contractor population.
Learning	These artefacts can be introduced in a much more far reaching fashion to have a positive impact on millions of people.

Taking the artefacts designed in the prior cycle, I intervened with real stakeholders through an interview process described in the prior section. I used Zoom to share my desktop and take them through the elicitation script. The purpose of the elicitation script was to create a “best-fit” retirement plan option for the interviewee. I finished with the adaptive default nudge, which is one question that asked which plan type they would choose while advising them that based on their answers, the plan type denoted with asterisks the best fit for them. After they made their choice, I asked what type of effect the best-fit designation had on their selection.

Each interview was recorded using the Otter app on my phone. Once the call was recorded, I logged into my Otter account online and listened to the interview again to correct any

words transcribed incorrectly. Once this step was complete, I created an extract of the transcript in a text file and copied and pasted it into Microsoft Word. After this step, I imported the transcript document into NVivo 12, the software I used to code the interviews.

Once the transcripts were uploaded into NVivo, I reviewed each interview for sentences and phrases that aligned with existing themes or were germane to my research questions and hypotheses to the extent it made sense to create a new theme (see Appendix F for the Coding Scheme). Table 8 above briefly describes each phase of the Implementation Cycle.

CHAPTER FOUR:

DIAGNOSIS CYCLE

The Diagnosis Cycle examined and validated the biggest driver of the nation's coverage crisis: small business owners do not adopt workplace retirement plans at a rate close to that of larger employers. Yet, this group employs 33 million Americans (GAO, 2017), a large percentage of the national workforce. In each cycle of elaborated Action Design Research (eADR) are 5 phases, including Problem, Artefact Creation, Evaluation, Reflection, and Learning (Mullarkey & Hevner, 2019). In the Diagnosis Phase, I used the review of literature, interviews from three small business owners and two industry experts, and 30 years of industry experience to gain insights.

As stated earlier, small business owners tend not to offer their employees a workplace retirement plan. In fact, one recent study suggests the percentage of small business owners that do not offer a plan is as high as 67% (GAO, 2017). Yet, their employees have the same needs for financial stability at retirement as any other employee. My goal was to learn if there is something unique to the small business owner that drives this significant difference in adoption rates.

I interviewed three small business owners (Appendix B) and two industry experts (Appendix A) to gather various insights about how small business owners think about retirement plans in the context of operating their business and how financial advisors support the retirement plan needs of small business owners. The first round of interviews started with the three small business owners, asking about their engagement with their employees, whether their employees

ask about workplace retirement plans, and to what extent they discuss their personal financial situations. The questions covered topics such as who is responsible for recruiting and hiring, do their recruits and employees ask for a retirement plan, do their employees discuss their personal finances, how important having the right employees is to the success of the business, did the small business owner participate in a plan at a previous job, employee turnover and morale, absenteeism, and why employees leave.

Next, I interviewed the two industry experts in order to compare their experiences against what I learned from the three small business owners. The first person I interviewed is a past President of the National Association of Plan Advisors (NAPA), an organization tasked with advancing the efficacy of the private pension industry. NAPA has 15,000 pension professionals, mostly financial advisors, focused on plan business as its membership. This individual also manages 250 financial advisors in a private practice and is tasked with business development and strategy, so he is uniquely qualified to speak about how financial advisors think about the small business owner. The second interviewee manages 4,000 financial advisors for an independent broker dealer and manages product approval, compliance, and many other aspects of doing business as a financial advisor. She is extremely well versed on how financial advisors think about growing their practice and what market segments and financial solutions are important to them. The motivation for these interviews was first to corroborate that there is a void of information available to small business owners, and that second, it is the financial advisor who typically delivers this information to the small business owner.

Based on this information, the artefact in this cycle was the identification of the problem space, which, in this case, was a void in information with small business owners. This void was driven by the fact that financial advisors are the main providers of retirement plan information to

the marketplace. Yet, financial advisors, except in rare occasions, do not work with small business. Figure 5 below shows the usual information supply chain, where a financial advisor engages with the appropriate personnel at a company to discuss their retirement plan options. The employer then decides to adopt a retirement plan and offers participation to their employees.

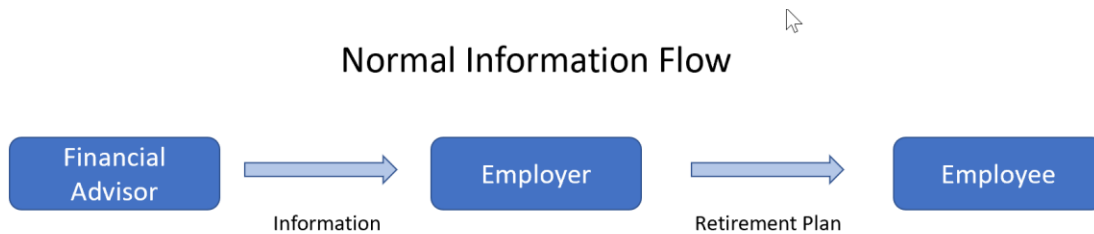


Figure 5. Normal Flow of Information

For small business owners, this flow of information works differently or not at all. Figure 6 below depicts the usual scenario, where a financial advisor will not interact with a small business owner, leaving them to gather information about retirement plans on their own. This situation leads to incomplete or inaccurate information, and the small business owner opting not to adopt a plan, leaving their employees without a workplace retirement plan.

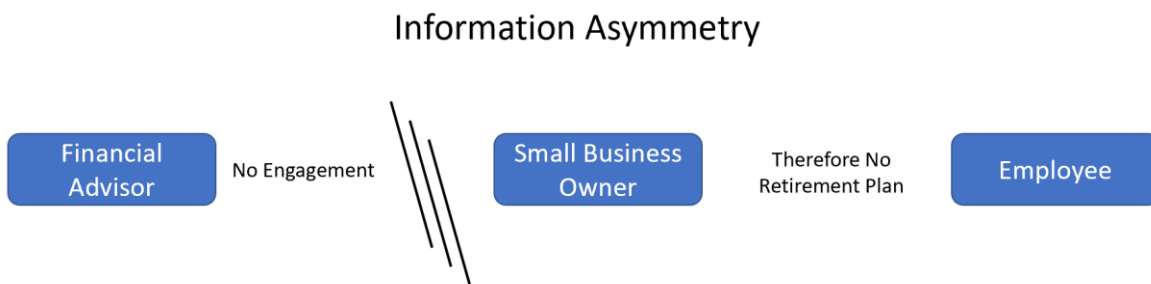


Figure 6. Information Asymmetry

To evaluate the artefact described above, I shared figures 5 and 6 above with an expert reviewer, the past President of NAPA, to gain his perspective. He agreed with the assessment

and shared the following thoughts, “Most retirement plan specialists prospect above the micro to small plan market (i.e. < 100 EEs and \$10M in plan assets) and have total disdain for new start-up plans. The primary reason is the lack of revenue potential for their singularly focused specialist business model when compared to other more mature retirement plan market segments they can pursue or service.” He further explained, “This leaves the small business owner underserved as their primary source of information and advice is a generalist or an occasionalist with retirement plan matters who are less proficient in creating the confidence that drives an actionable response to the delivery of advice and options” (J. Acheson, Past President National Association of Plan Advisors-NAPA, personal communication, October 29, 2019).

This insight was validated when interviewing the small business owners who had no real grasp of what their retirement plan options were and admitted to not having access to a financial advisor. One interviewee tried to describe a plan he thought he had in place, a SIMPLE IRA, but only he is participating. This scenario could not exist based on the rules of a SIMPLE IRA. It also became clear that most thought the 401(k) plan is the only plan type available, which also supports the survey findings that the number one reason small business owners do not adopt a workplace retirement plan is perceived cost (The PEW Charitable Trust, 2017). There also seemed to be a consensus that participants thought they had to contribute to the plan and were not prepared to do so, which was not the case with a 401(k) plan.

By reflecting on several questions, such as, *Why are medium and larger employers so much better educated about workplace retirement plan options? Where do they get their information, and why aren't small business owners getting this information from the same place?*, the hypothesis began to emerge that the financial advisor is likely where the medium and large employers get educated on retirement plan options. Most financial advisors do not

seek small business owners to sell them a retirement plan as evidenced in the prior expert testimony because financial advisors are paid as a function of the asset level of the plan. A small company installing a new plan would have small account balances for some time.

In my experience working with more than 16,000 retirement plans, the typical advisor compensation on plans under \$5 million is .50% to 1% of plan assets per year. If a company with 20 employees gets a plan and all 20 employees contribute \$3,000 the first year, it would represent a total asset balance of \$60,000, assuming no market fluctuation. At a compensation rate of 1%, the advisor would earn \$600 the first year. This amount would be for their services to establish the plan, educate and enroll the employees, meet regularly with the employer to discuss the plan, and answer questions from the employees regarding the plan and their investments. Since this practice is not scalable for financial advisors, most avoid small businesses. Again, there is no reason for this professional to engage with the small business owner. One industry expert also suggested that small business owners may get their information from Certified Public Accountants (CPAs), who are needed to fulfill the retirement plan audit requirement for plans with at least 100 participants. Once again, engagement with the small business owner is avoided, in this case with the CPA, because the employee population does not meet the 100 employee threshold required for an audit.

Considering some of the obstacles for financial advisors as well as the fact that they are the primary delivery mechanism for information about workplace retirement plans for small business owners, an artefact needed to be developed that engages more financial advisors with small business owners. An alternative was to develop a means to get information to small business owners in a new way so that they are not dependent on the financial advisor. The latter option needed to be a high traffic area because another issue that arose from the interviews is the

reality that small business owners fight to make payroll and keep basic services in their businesses, such as electricity in the facility. Therefore, they are not likely going to proactively seek information about a workplace retirement plan.

It would seem reasonable that financial advisors want nothing to do with small business owners, leaving a void for small business owners to get information about workplace retirement plans. For the design cycle, information was presented differently to the small business owner who did not have a retirement plan.

Based on the literature review and some industry surveys, it is clear that small business owners want to create a path to help their employees retire with dignity. This empathy is described as caring for the health and wealth of their employee. However, this desired is countered by small business owners stating the number one reason they do not put a plan in place is the perceived cost, so if we can educate small business owners about the true cost of a plan, the empathy and doing the right thing will outweigh the objection.

This approach provides the hook needed to gain the attention of the small business owner and get them engaged long enough to learn more about the various retirement plan options available, their cost, how the retirement plans can help alleviate personal financial stress for their employees, how that can increase employee engagement at the workplace, and how that benefits the small business.

CHAPTER FIVE:

DESIGN CYCLE

Through the design cycle, I focused on the creation of two artefacts. Each one involved a unique engagement process with the small business owner that had not been used to date in the capacity of driving retirement plan adoption. Given the iterative nature of eADR, I used current research to identify why the problem exists and what steps could be taken to circumvent the cause of the problem. In this case, the problem was status quo bias. I used the Framework for Evaluation in Design Science (FEDS) as a guide in the design and evaluation of the artefacts (Venable et al., 2014). The evaluation was completed on a formative basis, which was used to provide a base for successful action in improving the characteristics or performance of the evaluation (Venable et al., 2014). This method aligned exceptionally well with the research goal of persuading small business owners to adopt workplace retirement plans at a higher rate than what they do on a national level today. The formative method of evaluation was also ideal for this type of iterative cyclical artefact design and was predictive in nature (William, 1996). This evaluation was also considered ex-ante due to its predictive nature and performed to estimate and evaluate the impact of future situations. In this research, it utilized a series of artefacts designed to overcome information asymmetry, which drives status quo bias with small business owners (Stefanov, 2001). These artefacts provided the information in a way to initiate better, more informed decisions by the small business owners.

Venable et al. described four evaluation strategies used when building and measuring artefacts. The *Human Risk & Effectiveness* evaluation method provided an excellent fit for my

research study as it is formative in nature but can transition to summative as the research is conducted, evaluated, and measured (Venable et al., 2014). The selection criteria for this method include:

1. If the major design risk is social or user oriented and/or
2. If it is relatively cheap to evaluate with real users in their real context; and/or
3. If a critical goal of the evaluation is to rigorously establish that the utility/benefit is due to the artefact, not something else

Through this process, nudges were used to modify the behavior of the small business owner as it relates to their adoption of workplace retirement plans. I identified which nudges would likely elicit the best results, as there are numerous nudges that have proven to be effective in other capacities.

The two distinct artefacts were detailed as follows:

1. The Elicitation Script was eight basic interview questions followed by brief education ending with seven more interview questions conducted through polling software, which was designed to create a customer profile.
2. An Adaptive Default Nudge that used the customer profile created as the output from the elicitation script and designates a “best-fit” plan option. The interviewee then chose from one of the four options, with the “best-fit” option being highlighted.

Artefact 1: The Elicitation Script

The elicitation script artefact engaged the small business owner through a brief interview process followed by disclosure of basic information on three plan types, finishing with a very brief survey to elicit pertinent information from the small business owner through a script. This information was used to create a customer profile, which was used in a subsequent artefact, the

Adaptive Default Nudge, to identify the best type of workplace retirement plan based on the employer's specific situation.

Through the Learning and Reflection phases in the Diagnosis cycle, it was discovered that the main driver of the Status Quo Bias was information asymmetry. In fact, in one article about the fee disclosure requirements under IRS Sec 408(b)(2), the author called the information asymmetry "acute" (Buckley, 2011). The information necessary to make a well-informed decision was not making its way to the small business owner. The primary participant of the service delivery chain that typically educated the small business owner did not work with small business owners in this capacity, creating a void in knowledge. This information needs to be delivered to small business owners to assure their engagement in an information gathering process as well as be presented in a way to heighten the likelihood of the desired outcome while preserving freedom of choice, a key tenet of nudges.

Given the proper information, small business owners will make better decisions. Therefore, using nudges individually and in combination will drive a significantly higher adoption of workplace retirement plans. Based on my more than 30 years of retirement plan administration experience supplemented with the review of related literature, I have yet to come across knowledge of this approach used in the context of trying to persuade small business owners to adopt workplace retirement plans. The significant contribution to research took the existing research regarding the effective use of nudges to modify behavior and applied selected nudges in a unique way with small business owners to drive higher workplace retirement plan adoption.

The Elicitation Script started by guiding the small business owner through a brief series of interview questions about the employee related challenges of running a small business as described in Table 9 below:

Table 9. Preliminary Interview Questions

Q1	What made you want to start your own business?
Q2	What are your biggest challenges to growth today?
Q3	How are your employees critical to your success?
Q4	What benefits do you use today to attract and retain employees?
Q5	How disruptive is it to lose an employee?
Q6	Describe how important the quality of your employee is to the success of your business.
Q7	Have your employees requested access to a workplace retirement plan?
Q8	What is the reason you currently do not offer a retirement plan to your employees?

The purpose of the preliminary interview questions was to gain a sense of the biggest growth challenges and learn how the small business owner thinks about workplace retirement plans prior to the education element. After completing the Preliminary Interview Questions, I educated the small business owner on the types of plans (and their attributes) available to small companies using the chart in Table 10 below.

Table 10. Types of Retirement Plans

	401(k) Plan	SIMPLE IRA	Payroll Deduction IRA
Annual Cost of Administration	\$2,500 - \$5,000*	\$0	\$0
Minimum Employer Contribution	\$0	3% match or 2% Non-Elective	\$0
Fiduciary Liability	Yes	No	No
Hours to Administer (annually)	Up to 24	Up to 12	Up to 6
Effort/Cost to Terminate	5-20 hours/\$500+	Minimal/\$0	None/\$0

**Can be paid by employees in certain situations*

The education highlighted in Table 10 above was a key element of the elicitation script. It was used to close the void of the existence of acute information asymmetry. The elicitation script then continued with a short series of Polling Questions, shown in Table 11 below, using Poll Everywhere. This script was designed to gather basic information about the small business owner, briefly educate them on the benefits of a workplace retirement plan and ask questions to help determine the best retirement plan option for them. The premise for this design element

was that two small businesses in the same industry with the exact same headcount may have very different circumstances, leading to different outcomes in the selection of the optimal workplace retirement plan.

The polling questions were designed where each survey question response related to one or a few possible plan types. After answering the series of questions, one outcome received the most positive votes.

Table 11. Polling Questions

Q9: How much would you be willing to pay annually for administration.	A. \$0 B. Something but no more than \$1,000 C. Over \$1,000 if reasonable
Q10: How many hours per year would you be willing to dedicate to maintaining the plan?	A. None B. Up to 5 hours C. 5-10 hours D. More than 10 hours
Q11: How much would you be willing to contribute on behalf of your employees?	A. None B. Up to 3% C. More than 3%
Q12: How much would you like your employees to be able to contribute each year?	A. Nothing B. At least \$5,500 C. At least \$12,500 D. At least \$19,000
Q13: Are you willing to take on Fiduciary Liability	A. Yes B. No
Q14: Would you want to automatically enroll your employees?	A. Yes B. No
Q15: How much would you be willing to pay to terminate the plan?	A. Nothing B. Up to \$5,500

Once the Polling Questions were answered, I quickly tabulated the results as shown in Table 12. The design element, which significantly contributed to research, was the engagement model that used interview questions followed by a brief amount of education, finishing with the use of a brief list of questions to determine the plan type that was the best fit for that particular small business owner’s situation.

In the design of the interview and survey questions, I was careful not to overload the small business owner with too much information, which would have resulted in the loss of interest. The information offered was basic, yet pertinent and included plan attributes, such as

cost to the employer, ease of administration, and fiduciary exposure. Cost and ease of administration were selected specifically because surveys consistently show these two factors to be the biggest deterrents to the small business owner as to why they do not adopt a workplace retirement plan.

I believe having the small business owner talk about their employees and their importance to the overall success made them empathetic to their employees' need to have financial stability at retirement. I further believe the simple act of providing basic information about the plan types available to small businesses, along with the plan attributes, drove higher retirement plan adoption with small business owners.

Going back to one of the earlier interviews with a small business owner, participants admitted not being aware of the Payroll Deduction IRA and said they would put one in based on the attributes it offers. Participants were attracted to the fact that there was no cost to the employer and the accounts are very portable if the employee left the employ of this business owner. This interaction further supported the notion that armed with the right information about their situation, small business owners would be likely to make better, more well-informed decisions.

Even when presented with useful information, status quo bias was still prevalent. Using default nudges proved to be a powerful tool to overcome the stagnation around affirmative decision making. One problem with the default was one size fits all, but in real life it does not, especially with a decision of this nature. In the second artefact, I used my knowledge about the specific situation of that small business owner and "guided" him or her to the appropriate plan type. This action is known as an Adaptive Default Nudge, which is known to serve in an advisory capacity.

Artefact 2: The Adaptive Default Nudge

The second artefact I designed and tested is referred to as an Adaptive Default Nudge (Goldstein et al, 2008). This artefact takes the information supplied by the small business owner through the first artefact and determines which plan type is best suited for the circumstances of that small business owner, considering their situation and the objectives they hope to achieve. First, I applied a scoring legend, shown in Table 12 below. For each answer, one or more plan type, including “No Plan,” was eligible to receive a point as shown in Table 12. For instance, answering B in Polling Question 1 (PQ1) would mean plan types 2 (SIMPLE IRA) and 3 (PD IRA) align with the answer, and each of those plan types would receive one point for Question 1. This process is repeated through all seven questions. Upon completing the scoring, each option has a cumulative point total. The option with the most points is considered the best fit for that particular person.

Table 12. Scoring Legend

Plan Number	Plan Type			
1	401(k)			
2	SIMPLE IRA			
3	PD IRA			
4	No Plan			
	A	B	C	D
PQ 1	2,3,4	2,3	1,2,3	
PQ 2	4	3	2,3	1,2,3
PQ 3	1,3,4	1,2	1	
PQ 4	4	1,2,3	1,2	1
PQ 5	1,2,3	2,3,4		
PQ 6	1,2	1,2,3		
PQ 7	2,3	1,2,3		

Table 13 below is a completed scoring summary with this scoring system. In this case, the PD IRA had the most points with 6.

Table 13. Scoring Summary

	Answer	401(k)	SIMPLE IRA	PD IRA	No Plan
Question 1	C	1	1	1	
Question 2	B			1	
Question 3	A	1		1	1
Question 4	C		1		
Question 5	A	1	1	1	1
Question 6	B	1	1	1	
Question 7	A		1	1	1
Total		4	5	6	3

When asked to choose from a brief list of plan types, including a traditional 401(k) plan, a SIMPLE IRA, and a Payroll Deduction IRA, the choice that best meets their needs was preselected with two asterisks as shown in Table 14 below.

Table 14. Decision Table

Which Plan Would You Choose for Your Employees?	
	401(k) Plan
	SIMPLE IRA
**	Payroll Deduction IRA
	No Plan

As displayed above and based on the results in Table 13, Payroll Deduction IRA was preselected (defaulted) as shown above in Table 14 based on their answers, but the interviewee had the ability to change the answer. The unique design element here was to see if this Adaptive Default Nudge persuaded small business owners to go with what was selected based on the answers to their questions. The process ended with an interview element to learn if the small business owner felt the process was consultative, and if so, how much that affected their ultimate decision.

A standard default chooses the same plan for each small business owner, perhaps a SIMPLE IRA because they are a small business. But there are employer contribution requirements for SIMPLE IRAs, and the small business owner might want to give his/her employees the ability to save for retirement, but not have the cash flow to support an employer

contribution. I needed a default nudge that was adaptive in nature and that selected the best default option based on the information presented for that individual.

The rationale for the polling questions in Table 11 is reflected in Table 15 below:

Table 15. Rationale for Polling Questions

Q9	The 401(k) program is the more costly program to administer. This is to gauge willingness to pay for administrative services.
Q10	401(k) plans require more time to administer. The IRA programs are much less. This is used to determine if there are time constraints.
Q11	The SIMPLE IRA requires a small employer contribution, the PD IRA has no employer contribution, and only the 401(k) would allow you to contribute more than 3%. Answering A removes SIMPLE IRA from consideration.
Q12	Each answer aligns with a different plan type based on IRS deduction limits.
Q13	Answering No removes 401(k) from consideration.
Q14	Answering Yes limits options to 401(k) and SIMPLE IRA
Q15	There will likely be a professional fee to properly terminate a 401(k) plan, so answering Nothing would remove 401(k) from consideration.

The rationale was designed to ask about attributes that are characteristics for only one or two of the plan types and allowed for the use of an algorithm to determine the plan type that was the best fit. The significant research contribution for the second artefact was using Adaptive Default Nudge in conjunction with the elicitation script and creating a "best fit" outcome as it related to workplace plan adoption with small business owners. This engagement model was completely new and had not been used in the context of working with small business owners to increase retirement plan adoption rates. The combination of these two artefacts did increase workplace retirement plan adoption in a small sample size. The next application can be a broader, further reaching capacity, leveraging a digital design to reach the masses.

Because of the process the small business owner went through, they exhibited a much higher level of confidence in the plan selected for them, knowing it was tailored to their needs. This result was consistent with one of the known attributes of the Adaptive Default Nudge, which is it is considered to act in the capacity of an advisor.

This approach made it much easier for a small business owner to make this important, impactful decision and made the decision firmer. It was important to make this process clear, quick, and concise. Small business owners admitted not knowing much about retirement plans, so the fact that this type of nudge acts in an advisory capacity was likely met with favor.

CHAPTER SIX:

IMPLEMENTATION CYCLE

The research was designed to interact with the small business owner to assess what is known and felt about workplace retirement plans, then provide education on plans available along with the benefits and attributes, like cost. I finished the interview using a brief series of Polling Questions designed to elicit their business' unique situation. The Preliminary Interview Questions (Table 9), the education using the Types of Retirement Plans (Table 10), and the Polling Questions (Table 11) comprised the artefact known as the Elicitation Script. I then created a customer profile using the data created in the elicitation script. I followed this by suggesting the most suitable plan type based on the customer profile, which is known as an Adaptive Default Nudge. I recorded how often the participant selected this pre-selected option versus changing it to another option. One option was "No Plan," preserving the freedom of choice of doing nothing. Freedom of choice is a key tenet of nudging. The goal of the research was to determine if I could "nudge" the small business owner into making better decisions about workplace retirement plan adoption.

Once the selection from the options available was made, I engaged in additional interview questions, asking how the participant felt about the decision and what factors led to the decision. I asked the participant if the fact that the plan type had been preselected changed his/her decision in any way.

Testing with Small Business Owners

I interviewed a convenient sample of small business owners with approximately 10 to 50 employees or independent contractors. These small businesses were all domiciled in the state of Florida and covered several different industries with varying levels of employee skill sets in terms of technical competence from mowing lawns to information technology. Table 16 below provides information about the sample of small business owners that I interviewed.

Table 16. Interview Demographics

Interviewee	Gender	Age	Business Type	# of Employees
Pilot	M	31-40	Information Technology	10
1	M	31-40	Information Technology	12
2	M	31-40	Insurance	22-25
3	M	61-70	Printing	30
4	M	41-50	Staffing	50
5	M	31-40	Limousine Service	10-12
6	M	51-60	Country Club	50
7	M	31-40	Bar	25
8	F	41-50	Food Packaging Service	12
9	M	41-50	Home Inspection	10

Interview Protocols

The interview process started with gaining approval for my study from the University of South Florida (USF) Institutional Review Board (IRB). The IRB approved my study with exempt status. While the IRB reviewed my application, I looked for 10 small business owners that did not currently have any type of retirement plan, which started with a solicitation process. I worked through my professional network, including local bankers, trustees, CPAs, payroll companies, and Professional Employer Organizations (PEOs). Once someone expressed interest, I sent them the Informed Consent to Participate in Research Involving Minimal Risk Form, shown in Appendix D. Because this study was considered exempt by the IRB, no signature was necessary. The form stated that proceeding with the interview served as consent.

When the participant agreed to move forward, we established a date and time to conduct the interview. The interview was conducted using Zoom, which allowed me to share my screen through the computer. I used a PowerPoint presentation to show the participant the question while I read them. I started with the preliminary interview questions shown in Table 9. These questions focus on running and growing the business and the challenges the participant faces. Once I completed these questions, I shared basic information about the types of retirement plans available to small business owners as detailed in Table 10. I then launched Poll Everywhere and went through the seven polling questions detailed in Table 11. This process is referred to as the Elicitation Script.

Once the Elicitation Script was complete, I tabulated the results of their answers and pulled up a screen that showed four possible options for them as shown in Table 12. One options was pre-selected as a “best-fit.” I then asked the participant to make a choice, with the knowledge that the selection with the asterisks next to it was deemed to be the best selection. This customized recommendation process is the Adaptive Default Nudge.

Coding the Interviews

Each interview was recorded using Otter with the app on my phone. Once the call was recorded, I logged into my Otter account online and listened to the interview again and corrected any words transcribed incorrectly. Once this step was completed, I created an extract of the transcript in a text file then copied and pasted it into Microsoft Word. I then imported the transcript document into NVivo 12, the software I used to code the interviews.

Once the transcripts were uploaded into NVivo, I reviewed each interview for sentences and phrases that aligned with existing themes or were germane to my research questions and

hypotheses to the extent it made sense to create a new theme. See Appendix F for the Coding Scheme.

This process allowed me to conduct qualitative research to prove or refute my hypotheses. Some of the themes I focused on are listed below:

- challenges to growth
- methods used to attract and retain employees
- importance of quality employee and cost of losing employees
- reasons for not having a retirement plan
- interactions with financial advisors
- information asymmetry
- employee’s inability to save
- sense of being counseled by pre-selection process

Results

I interviewed small business owners varying in industry, age, and number of employees shown in Table 15. The interview transcripts were coded using NVivo 12. The number of occurrences of each code are shown in Table 17 below. Through coding themes, I evaluated the prevalence of certain themes as well as the context in which they were used in my evaluation. The table below shows when a theme occurred in an interview but not how many times. Each interview is numbered, where P is Pilot.

Table 17. Coding Occurrences

Code Name	Interview Number									
	1	2	3	4	5	6	7	8	9	P
Adaptive Default Nudge			X							X
Counseled			X	X						X
Comfort of Guidance			X							
More Informed		X	X							
Employee Attraction / Retention		X			X					
Benefits Offered	X	X	X	X		X				X

Table 17 (Continued)

Code Name	Interview Number									
Compensation						X	X		X	
Bonuses	X	X				X				
Cost of Losing an Employee	X	X	X		X	X	X	X		X
Culture	X	X	X							
Employee Criticality to Success	X	X		X	X	X		X	X	X
Quality of Employee	X	X	X	X		X			X	X
Employee Engagement										
Personal Financial Stress			X							
General Business Themes										
Biggest Challenges	X				X			X		
Regrets			X							
Why Did You Start Your Business		X	X	X	X	X	X	X	X	
Information Asymmetry										
Administrative Burden	X	X		X						X
Costs	X		X			X		X		X
Fiduciary Liability	X		X	X					X	
Financial Advisor Relationships		X		X						
Plan Types										X
Workplace Retirement Plans										
Are Employees Asking for a Plan		X	X	X	X	X			X	X
Financial Literacy		X							X	
Why Don't You Have a Plan	X		X	X						X
Employees Living Check to Check						X	X			
Self Interest						X				
Timing			X						X	

Coding Results

The qualitative findings of my coding were as follows:

Adaptive default nudge

This code also included sub-codes of Counseled, Guidance, and More Informed. There were eight occurrences of these themes. I asked Interviewee #4 if he felt counseled by the preselection of the plan and his response was “significantly.” It was not just his selection of words, but how emphatically he stated it and without hesitation. A similar occurrence with Interviewee #3 answering “yes” to same question, but again the conviction in his voice inflection was telling. In most cases, the participant felt much more comfortable in the decision because it was represented as “best fit.” Also, in most cases, the participant admitted feeling counseled and

consulted. Referring back the literature review, one attribute of an adaptive default nudge was that it acted in an advisory capacity.

Employee attraction and retention

This code also included sub codes Cost of Losing an Employee, Employee Criticality to Success, Quality of Employee, Compensation and Benefits Offered. There were 41 occurrences in this group. A fascinating finding was when asked what their biggest challenge to growth was, almost without fail the answer was employees. Specifically, the attraction and retention of quality employees. This answer was a significant finding in that retirement plans are considered an extremely effective tool for the attraction and retention of employees. There seemed to be similar consensus with how important employees were to the success of the organization and how impactful it was to lose an employee. There were nine instances in Cost of Losing an Employee, nine instances in Employee Criticality to Success, and seven more in Quality of Employee. When asked if employees were critical to success, Interviewee #1 responded, “Okay, so all of my employees are not critical to the success, I would say my key employees are critical, critical to the success right,” and went on to state the more technical the employee, the harder to replace. Along this same topic, Interviewee #2 responded, “everybody that works with us is incredibly critical.” This company sells homeowners insurance and was simply stating the front lines sales was as critical as the back-office support and vice versa. When asked about how costly it was to lose an employee, nine themed responses emerged. Interviewee #1 responded by saying it was “tremendously” disruptive. He owns an Information Technology (IT) outsourcing practice and explained, “And you can't just pick up the biggest best person off the corner, they're not going to know our industry, right. So no matter who we get, we do have to train them. We are a leader in our space, and our way is different than anybody else's way of doing things. And

training is pretty extensive. And it takes about three months to even get somebody in a position to where they can even actually help, regardless of the position that they're in.” Considering these responses, it is abundantly clear that small business owners would take reasonable measures to attract and retain employees.

Why did you start your own business

A common theme among most small business owners was not wanting to work for someone else and doing things their way. I believe this theme is relevant for future research on Multiple Employer Plans (MEPs). MEP adoption relies on the nudge known as social norms, which is effectively following others to a common solution. MEPs may not get the adoption the government is hoping for because of a personality trait conflict with the target audience.

Information asymmetry

This code included 16 themed references and included sub codes Administrative Burden, Costs, Financial Advisor Relationships, and Plan Types. The findings in this group were consistent with my professional experience and literature review. However, there were additional insights. One insight was that the only interviewee who knew what fiduciary liability was happened to previously own a larger company and was the trustee of his 401(k) plan. When I explained what it was to the broader audience, most wanted to avoid at all costs. Interviewee #4 went so far as to say, “I want to know who the heck would sign up for that.” I also experienced people mismatching terms and concepts between plan types, which means they did not fully understand the plan types available. The Pilot Interviewee said only he had a SIMPLE IRA account (none of his employees did), which cannot be the case. Almost everyone seemed to think the 401(k) was the only plan type available. Very few participants had heard of a SIMPLE IRA and even fewer of a Payroll Deduction IRA. This lack of information was likely the reason

most thought they could not afford a retirement plan. Cost was mentioned five times as a reason a plan was never put in place. Interviewee #3 said, "...and the margins in the printing business are very small. So between the small margins and the capital intensive equipment. Just never did. We never offered it." Interviewee #6 stated the following when asked if he would consider putting in a plan, "basically I have a pool of money that I want to spend towards employees, and I try to put all of it into cash." He was referring to young waitstaff preferring money over an employee contribution. This comment underscored the lack of information on contribution requirements of retirement plans.

Workplace retirement plans

This code included the sub codes of Are Employees Asking for a Plan and Why Don't You Have a Plan. There were several interesting discoveries through this line of questioning. One of the interviewees had a plan. I had spoken to him 12 months before and asked if he had a plan; he said his employees did not want one. I asked how he knew, and he said he just knew. In this round of interviews, I learned he put in a 401(k) plan on January 1st, and when asked why, he stated the following conversation with his employees, "we've looked at different health insurance options for you, 401(k), and this and that, you know, but right now, we can do one or the other. So you let us know what it is that you guys want to pursue and go after. And there wasn't one hand for the health insurance side, every single one of them was looking for retirement plan." This response demonstrates that small business owners often think they know what their employees want, but may not. The other revelation in this discussion was that his education about the 401(k) came from a financial advisor. However, the only reason they had the interaction was because they are friends, not because the financial advisor cold called him

trying to sell a plan. Conversely, almost every other interviewee admitted having no interaction with a financial advisor, further supporting Hypothesis 1.1.

Two unanticipated findings were one participant saying he did not have a plan because he was too old and planned on selling company. He admitted he wished he had put one in long ago. Another deterrent I had not contemplated prior to the research was one business owner saying since he could not participate, he had no interest putting a plan in to help his employees. He could not participate because he did not draw a salary from the company. These outliers are important because out of the 55 million Americans not saving for retirement through a workplace retirement plan, they reveal that some carve outs may never get access for these types of reasons.

The key takeaways in this section were the importance of employees and cost of losing employees, the profound lack of knowledge of types of retirement plans, and the lack of interaction with financial advisors.

Table 18. Summary of Customer Profiles

Polling Questions		A	B	C	D
1	How much would you be willing to pay in admin fees	1	3	4	
2	How many hours a year would you be willing to spend on plan	1	2	4	1
3	How much money would you be willing to contribute	3	4	1	
4	How much would you like your employees to contribute		6	2	
5	Are you willing to take on Fiduciary Liability	1	7		
6	Would you want to automatically enroll employees	4	2		
7	How much would you be willing to pay to terminate the plan	5	3		
Plan Types					
		Nudge Selection		Participant Selection	
1	401(k)	1		1	
2	SIMPLE IRA	3		1	
3	PD IRA	4		6	
4	No Plan	2		2	

Interpreting the Customer Profiles

The following findings result from the answers to the Polling Questions as shown in Table 11.

Willingness to pay for plan administration

This result was a little surprising and showed small business owners are prepared to spend some money to take care of their employees, despite cost being cited as the biggest deterrent to adopting a plan (PEW Charitable Trust, 2017). Four respondents were willing to pay more than \$1,000 per year.

Willingness to spend time administering the plan

Despite administrative burden being the second most prevalent reason for not adopting a plan, small business owners showed a willingness to take on the burden of having a plan (PEW Charitable Trust, 2017). Seven respondents were willing to spend some time administering a plan for their employees.

Willingness to contribute money to the employees account

Most respondents said they would contribute nothing or up to 3%, which was consistent with the small business owners' concerns surrounding overall cost.

How much would you like your employees to be able to contribute

This response often was interpreted to “how much do I think they would contribute” and was consistent with the theme of employees living check to check. Most small business owners felt their employees would be hard pressed to contribute \$5,500 per year, which is especially true with food service businesses, i.e. bars and country clubs.

Willingness to take on fiduciary liability

Only one respondent was willing to take on fiduciary liability. Couple this with the enthusiasm exhibited by many when answering no, I conclude this issue was a major obstacle to small business owners adopting certain workplace retirement plans, namely a 401(k), that is subject to fiduciary liability.

Would you want to auto-enroll your employees

Most would want to auto enroll their employees, which exhibited some paternalistic characteristics. One interviewee even said, “a guy can’t be climbing around on roofs when he is 70,” explaining it is important that the business owner needs to help ensure the employees have adequate retirement savings.

How much would you be willing to pay to terminate the plan

The vast majority would not be willing to pay the fee required to terminate a 401(k) plan. This result demonstrates another hurdle for small business owners to adopt a 401(k) and could be considered a policy implication.

Which plan would you choose

In all but two cases, the small business owner selected the option recommended by the adaptive default nudge. Another interesting finding was the dispersion between plan types. This finding was significant because if the default used were static in nature, everyone would be recommended the same plan type. This result clearly demonstrates the effectiveness of the adaptive default nudge and the importance of moving from a static default nudge to a dynamic default nudge.

Conclusions

Several conclusions were drawn when comparing the coding results and the Coding Occurrences in Appendix H with the evaluation of the customer profile summary. Small business owners considered the attraction and retention of quality employees the biggest challenge in growing their business as evidenced in occurrences of this theme and the related thematical narrative. They also wanted to do the right thing for their employees and help them retire with dignity, stating they were willing to pay something for administration and spend some

of their time administering a plan as well as make a contribution on behalf of employees and auto enroll them.

There was also an inclination to start with a no cost type of program, like a Payroll Deduction IRA, and grow into a more sophisticated program, like the SIMPLE IRA and eventually graduate to a 401(k). This transition also may allow small business owners to get more comfortable with the concept of fiduciary liability, which was a big obstacle to plan adoption based on the results of my research. Small business owners were eager to learn more about the types of retirement programs available to them when the information was presented in a clean, concise fashion and done over a relatively short time frame. Lastly, the combination of the two artefacts resulted in higher workplace retirement plan adoption rates. Most of the interviewees acknowledged being educated and counseled to what they considered a very comfortable decision.

CHAPTER SEVEN:

RESEARCH IMPLICATIONS

Academic Implications

Research Question 1 addressed the reasons small business owners do not adopt workplace retirement plans. Due in large part to 30 years of industry experience, Hypothesis 1.1 stated there is a gap in the information supply chain, which I refer to as information asymmetry. The research study proved this Hypothesis to be true through the interviews I conducted with both industry experts and small business owners. Most small business owners interviewed were not aware of retirement plan types other than the 401(k) plan. In Hypothesis 1.2, I stated that this information void exists because financial advisors are a major information delivery mechanism to employers as it relates to retirement plan information, and financial advisors are not talking to small business owners. The research study proved this Hypothesis to be true through the interviews conducted with the industry experts and the small business owners. Both industry experts agreed smaller employers are avoided by financial advisors. When interviewing small business owners, all but one had not been approached by a financial advisor, and the one that was said it was because they are friends.

Research question 2 asked how a decision-based artefact using nudge theory can be designed to effectively persuade small business owners to adopt a workplace retirement plan. Hypothesis 2 two stated that nudges such as default nudges and disclosure nudges can be used to engage small business owners and persuade them to adopt workplace retirement plans. I believe the research study proved the disclosure nudge is an effective nudge to increase workplace plan

adoption. Specifically, when educating the small business owner on his/her retirement plan options, several thought the Payroll Deduction IRA would be a good solution for them. I do not believe the research supported the standard default being an effective nudge to persuade small business owners to adopt workplace retirement plans. This result is due to the fact that a standard default nudge is one size fits all. The scoring summary shown in Table 10 shows a broad dispersion in the plan types selected among those interviewed. One size does not fit all.

Research question 3 took inertia facing the standard default into consideration and contemplated how would one build and evaluate an artefact with built-in nudges used to drive up retirement plan adoption for small business owners. Considering the need to make the default adaptive, Hypothesis 3 stated that by making the default nudge adaptive, so they are customized to the specific situation of the small business owner, the small business owner is more likely to act on the “advice” of the nudge because they will feel like they have been counseled.

The research study proved Hypothesis 3 to be true. The vast majority of those polled agreed with suggested plan option, as best fit. While voice inflection could not be captured in the transcripts, there often was significant enthusiasm when asked if the “pre-selection” helped with their decision-making process. Most agreed that they felt counseled and advised, which gave them comfort in their decision.

Practical Implications

The practical implications of this research are vast. The retirement coverage gap is comprised largely of the employees of small business owners. More than 55 million working Americans do not have access to a workplace retirement plan (CRI, 2018). Sixty seven percent of small businesses, with 50 or less employees, do not offer a workplace retirement plan (GAO, 2017), which is driven mostly by an information void, or information asymmetry, that exists with

the small business owner's knowledge of what types of workplace retirement plans are available to them. Interestingly, some aspects of this issue are consistent between national studies and my research. My interview subjects thought retirement plans are too expensive and would take too much of their time to administer. They also thought that the 401(k) plan is the only option available. They also had little, to any, interaction with a financial advisor, who is the professional most responsible for educating employers about the various aspects of workplace retirement plans. The problem seems to be that financial advisors do not interface with small business owners, which results in this information void. I examine the practical implications of this void by looking at three distinct stakeholder groups.

Small Business Owners

Educating small business owners about that types of workplace retirement plans available to them and the attributes of each plan type will lead to better decisions regarding plan adoption. A better decision for plan adoption leads to higher participation rates, which will lead to more engaged, productive employees. This outcome will diminish financial stress and reduce stress related employee issues, such as absenteeism, accidents, errors, theft, and higher insurance premiums.

Every small business owner interviewed cited employees as the biggest challenge to growth. This challenge included finding and retaining quality employees. Most participants explained that employees are costly to lose and critical to the success of their organization. Implementing workplace retirement plans would allow small business owners to attract and retain higher quality employees, removing what they consider to be their biggest barrier to growth.

In addition, using the methods described in this research will reduce the cost to acquire new clients, which should lower or stabilize financial advisor fees for participants and, in some cases, the business owner.

Financial Advisors

Financial advisors specializing in retirement plans have long avoided working with small businesses, citing lack of ability to create a scalable, profitable practice. This avoidance is partly due to the cost of acquiring new clients. Through this research, financial advisors can use the methods detailed in this paper to easily capture new clients, significantly driving down the cost of acquisition. Financial advisors can build these methods into their web based experience where small business owners can take a questionnaire similar to the elicitation script and Adaptive Default Nudge described in chapter five to choose a plan type that will take them to an online plan adoption process, thereby mitigating the amount of work typically required by a financial advisor to bring a new client onboard. This process will create additional capacity for financial advisors and their firm to take on more clients.

Employees/Independent Contractors

The practical implication for employees is higher availability of workplace retirement plans for employees of small businesses. This increased availability applies to independent contractors as well because they can participate in a Payroll Deduction IRA, but again, most small businesses are unaware that these programs exist. The gig economy is growing at a rapid rate; these contractors rarely are covered by any type of a retirement plan.

Having access to a workplace retirement plan will encourage retirement savings for employees and independent contractors, which will drive down personal financial stress and some of the side effects associated with it, such as health related issues. Another practical

implication would be to build an elicitation script and adaptive default nudge for the individual participant to achieve higher participation rates and higher savings rates.

Policy Implications

The policy implications of this research focus on state level plans being implemented as well as pending legislation regarding Multiple Employer Plans (MEPs). California and Illinois are two of the first states to put a state sponsored plan in place. Current activity of these state sponsored plans can be found at the Georgetown University Center for Retirement Initiatives (<https://cri.georgetown.edu/>). The legislation typically imposes financial penalties to businesses with over 5 (in California) to 25 (in Illinois) employees (depending on the State) that do not offer a workplace retirement plan. The option is to enroll in the state sponsored plan. These plans are Payroll Deduction IRAs. If you have what the state considers to be an employer sponsored retirement plan, you meet the requirements to not be penalized. Interestingly, a Payroll Deduction IRA from the private sector does not meet these qualifications, though the states are using that solution. To date, adoption has been fairly tepid in the state sponsored plans.

One policy implication is to allow private sector Payroll Deduction IRA solutions to satisfy the requirement of having a plan in place. This research clearly demonstrates that most small business owners are unaware of this inexpensive and easy to administer solution. It would be easy and manageable to have a set of requirements in order to be an approved private sector solution. The government easily can have an approved investment list and fee caps to ensure no bad actors take advantage of an unsuspecting saver. Also, the government can require that practitioners working with these plans have certain designations, like the Accredited Investment Fiduciary (AIF) designation at the individual level and the Certification for Fiduciary Excellence (CefEx) at the firm level.

Another policy implication is slight modifications to the pending legislation on Multiple Employer Plans (MEPs). Many participants interviewed were not willing to pay anything for plan administration and extremely opposed to the thought of assuming any fiduciary liability. There should be further consideration of ways to lower costs further with the MEP, which might be accomplished through a reduction in the amount and depth of compliance testing and government reporting that needs to occur for members of a MEP. In addition, driving down or eliminating fiduciary liability for the small business owner would make them more likely to participate in one of these programs. Absent that, most small business owners would opt for the Payroll Deduction IRA, once they know it exists.

CHAPTER EIGHT:

CONCLUSIONS, RESEARCH CONTRIBUTIONS, LIMITATIONS, AND FUTURE RESEARCH

Conclusions

After conducting the research, I concluded that acute information asymmetry exists with small business owners' knowledge of workplace retirement plan options available to them, including the costs and attributes of those plans. Consistent with other research, small business owners believe the 401(k) plan is the only available option, which is the reason that cost is the leading deterrent to adopting a plan. The adaptive default nudge consistently persuaded the small business owner to make a better, more informed decision. The small business owner also seemed confident and comfortable in the decision they made as a result of the Adaptive Default Nudge. In one instance, the participant responded in an emphatic manner, acknowledging the positive effect.

Research Contributions

The academic contributions offered by this research include using a unique combination of nudges to improve decision making. Two artefacts were diagnosed, designed, and implemented using the framework of elaborated Action Design Research. The problem space was evaluated in the diagnosis cycle, providing the information needed to design two artefacts, the elicitation script, and the adaptive default nudge. These two artefacts were tested in a live environment with small business owners to determine their efficacy in persuading small business owners to adopt workplace retirement plans. Through rigorous testing in a live environment, it

was proven that the two artefacts designed increased the adoption rates of workplace retirement plans with small business owners.

Limitations

There were several limitations to this research. The first limitation was the sample size and demographics. Gathering interview subjects proved to be challenging in the sense that the research description often was not read carefully, and the subjects realized shortly before the interview that they did not meet the criteria. I also ended with a sample set heavily concentrated on males. It could be meaningful if women prove to be more empathetic and more concerned about the financial well-being of their employees. Another limitation was the true commitment to the decision made by the interview participants. Picking an option in an interview is not the same as signing a contract, so it will be interesting to see if turning this research into a digital experience without human interaction yields the same or similar results. However, one interview candidate expressed a strong interest to have me establish a Payroll Deduction IRA for her company after the interview, and two others expressed similar interest.

Another limitation was the Polling questions could be tightened so that there could only be one possible plan type recommended. There were situations where the score was tied, but one of the answers eliminated one of the two plan types with the most points.

Another limitation was geographic proximity of the interview subjects. Due to IRB requirements coupled with time restrictions, all the subjects were from the state of Florida. It would be interesting to include participants from other geographic regions to see if their views and beliefs are different. Since Florida tends to have more seasonal employees than most states, this employee attribute would make an employer less open to adopting a workplace retirement plan.

Future Research

The research provides some interesting, meaningful observations, but it also offers a solid foundation for future research in several areas. It would be interesting to create a digital nudge with no human interaction to determine if being interviewed by a person had any impact on selecting the plan highlighted with the adaptive default nudge versus going through the solicitation script online with no human intervention.

One major area of future research is the effect of nudges on the adoption of Multiple Employer Plans (MEPs). The combination of nudges I presented to small business owners clearly led to a higher adoption rate of workplace retirement plans. However, the adoption of MEPs relies somewhat on the nudge known as Social Norms (Table 4), which presumes people will follow the decisions made by other similar groups of people. In my interviews, I found that small business owners exhibited many of the typical characteristics of an entrepreneur, including being a leader rather than a follower. They tend to be rigid in their thought process and may not be prepared to “follow” the pack, thereby making this plan option much less effective than what the government hopes.

Another opportunity for future research is to conduct it in a much weaker job economy. “Employees” was the overwhelming response to the question of participants’ biggest challenge to growth. There was a sense that the small business owner recognized employees are critical to their success and needed to pull out all the stops to attract and retain employees, which may have skewed the adoption rates I experienced. This research can be used to reduce the national retirement coverage crisis and drive retirement savings opportunities to millions of American workers.

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APPENDIX A:

INDUSTRY EXPERT INTERVIEW QUESTIONS FOR DIAGNOSIS PHASE

- Explain your role within the retirement plan industry?
- What is your role within your company?
- Describe the types of companies you work with, and how you interact with small businesses?
- Describe how you work with financial advisors, and how they interact with small businesses.
- Why aren't more financial advisors working with small business owners?
- When you do see advisors working with small business owners, what do you find that attracts them to those opportunities?
- How do we get more financial advisors working with small business owners?
- Do you believe small business owners have a lower rate of plan adoption than larger employers?
- If yes, to what do you attribute this to?
- How would you rate small business owner's knowledge of retirement plans?
- To what extent do you think that small business owners think the only retirement plan available is the 401(k) plan?
- To what extent do you think small business owners think about the effects of personal financial stress on their employees?

APPENDIX B:

SMALL BUSINESS OWNER INTERVIEW QUESTIONS FOR DIAGNOSIS PHASE

Interview Questions for Small Business Owners

- Tell me about your company.
- How many employees do you have?
- How many open positions do you have today?
- Why do you believe those positions remain unfilled?
- Who is responsible for onboarding new employees?
- How important is it to have the right employee?
- How often are retirement plans part of the discussion when you are interviewing new employees?
- When an employee leaves voluntarily, what would you say are the top reasons?
- What would you say are average number of days an employee is absent per year?
- Why don't you offer a retirement plan today?
- What are some of your biggest challenges finding the right people?
- How would you describe overall employee morale?
- Have your employees asked you to put in a retirement plan?
- Have you ever conducted an employee engagement survey?
- Have you ever had to alter your growth strategy because of inability to hire the right people?

Polling Questions:

Question 1: How much would you be willing to pay annually for the administration of the plan?

- A. \$0 per year (aligns with no plan, PD IRA, SIMPLE IRA)
- B. Something, but no more than \$1,000 per year (aligns with PD IRA or SIMPLE IRA)
- C. Willing to pay more than \$1,000 if reasonable (aligns with all plan types)

Question 2: How many hours per year would you be willing to dedicate to maintaining the plan?

- A. None (aligns with no plan)
- B. Up to 5 hours per year (aligns with PD IRA)
- C. 5 – 10 hours per year (aligns with SIMPLE IRA)
- D. More 10 hours per year, but no more than 20 (aligns with 401(k))

Question 3: How much money would you be willing to contribute on behalf of your employees each year?

- A. None (aligns with no plan, PD IRA, and 401(k))
- B. Up to 3% of compensation (aligns with SIMPLE IRA and 401(k))
- C. More than 3% of compensation (aligns with 401(k))

Questions 4: How much money would you like your employees to be able to contribute each year?

- A. Nothing (aligns with no plan)
- B. At least \$5,500 (aligns with PD IRA)
- C. At least \$12,500 (aligns with SIMPLE IRA)
- D. At least \$19,000 (aligns with 401(k))

Question 5: Are you willing to take on Fiduciary Liability, which means you can be held personally liable for errors and omissions related to the plan?

- A. Yes (aligns with all plan types)
- B. No (aligns with no plan, PD IRA, SIMPLE IRA)

Question 6: Would you want to be able to automatically enroll employees into the plan?

- A. Yes (aligns with 401(k) and SIMPLE IRA)
- B. No (aligns with 401(k), SIMPLE IRA, and PD IRA)

Question 7: How much would you be willing to terminate the plan?

- A. Nothing (aligns with SIMPLE IRA, PD IRA, and no plan)
- B. Up to \$5,000 (aligns with all plan types)

Which Plan Would You Choose for Your Employees:

- 401(k) Plan
- SIMPLE IRA Plan
- ✓ Payroll Deduction IRA
- No Plan

APPENDIX C:

IRB APPROVAL LETTER



RESEARCH INTEGRITY & COMPLIANCE
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9/24/2019



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Gulfport, FL 33707

RE: **Exempt Certification**
IRB#: Pro00042190
Title: Nudging Small Business Owners to Increase Workplace Retirement Plan Adoption

Dear Mr. Kirtland:

On 9/21/2019, the Institutional Review Board (IRB) determined that your research meets criteria for exemption from the federal regulations as outlined by 45 CFR 46.104(d):

(2) Research that only includes interactions involving educational tests(cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:(i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in the Belmont Report and with USF HRPP policies and procedures.

Please note, as per USF HRPP Policy, once the exempt determination is made, the application is closed in ARC. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant an Amendment or new application.

We appreciate your dedication to the ethical conduct of human subjects research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

A handwritten signature in blue ink that reads 'Melissa Sloan'.

Melissa Sloan, PhD, Vice Chairperson
USF Institutional Review Board

APPENDIX D:

**INFORMED CONSENT TO PARTICIPATE IN RESEARCH INVOLVING MINIMAL
RISK**



Informed Consent to Participate in Research Involving Minimal Risk

Pro #00042190

You are being asked to take part in a research study. Research studies include only people who choose to participate. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called:

Workplace Retirement Plan Adoption Habits by Small Business Owners

The person who is in charge of this research study is Pete Kirtland. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. He is being guided in this research by his Faculty Advisor, Alan Hevner.

The research will be conducted online using Zoom to perform the interview and *Poll Everywhere* will be used to answer the survey questions during the interview.

Purpose of the study

The purpose of this study is to learn if small business owner consumer behavior towards workplace retirement plans can be positively influenced based on certain information presented, how it is presented, as well as how the options are presented.

If you own a business with 10-50 employees, and do not currently offer a workplace retirement plan, and would like to participate in the study, please contact Pete Kirtland at (813) 766-4273 or by email at pkirtland@mail.usf.edu.

Why are you being asked to take part?

We are asking you to take part in this research study because you are a small business owner with between 10-50 employees, and do not currently offer your employees a workplace retirement plan. The goal of the study is to gain insights on the factors that drive small business owner consumer decisions as they relate to the adoption, or avoidance, of workplace retirement plans.

Study Procedures:

If you take part in this study, you will be asked to:

Provide specific basic information about the your company, including industry, number of employees, and how you view current hiring and retention conditions/challenges. Additionally you will be provided basic information on a few retirement plan types and and answer up to 6 brief survey questions. Upon completion of the survey questions you will explain to the Principal Investigator what factors led to your decisions. In total, the entire interview should take no longer than 15-20 minutes. No personal or financial information will be discussed.

Total Number of Participants

About 10 small business owners will take part in this study from the Muma College of Business.

Alternatives / Voluntary Participation / Withdrawal

Your participation is voluntary. You do not have to participate and may stop your participation at any time. There will be no penalties or loss of benefits or opportunities if you do not participate or decide to stop once you start. The answers that you provide are for informational and educational purposes only.

Benefits

The potential benefits of participating in this research study may include: having a better understanding of the different types of retirement plans that are available to small business owners along with the attributes of each, as well as the potential benefits, including increased employee engagement, of offering a retirement plan.

Risks or Discomfort

This research is considered to be of minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

There will be no compensation paid for participating in the study. You will have access to the results of the research. In addition, you will hopefully gain a better understanding of workplace retirement plans and the potential costs, benefits and other attributes that go along with them.

Costs

It will not cost you anything to take part in the study.

Privacy and Confidentiality

We will do our best to keep your records private and confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Certain people may need to see your study records. The only people who will be allowed to see these records are: Pete Kirtland, the Principal Investigator, Dr. Alan Hevner, the Faculty Advisor, and The University of South Florida Institutional Review Board (IRB).

The research involves complete confidentiality. This survey research is based on using a group of participants. Individual participants will not be identified. Any participant can withdraw from the study at any point for whatever reason. Should you decide to withdraw, any information provided to the study will be excluded.

We will keep your study records private and confidential. Certain people may need to see your study records. Anyone who looks at your records must keep them confidential.

These individuals include:

- The research team, including the Principal Investigator, Faculty coordinator, and all other research staff.
- Certain individuals at the university who need to know more about the study, and individuals who provide oversight to ensure that we are doing the study in the right way.
- The USF Institutional Review Board (IRB) and related staff who have oversight responsibilities for this study, including staff in USF Research Integrity and Compliance.

It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this online survey involves risks similar to a person's everyday use of the Internet. If you complete and submit an anonymous survey and later request your data be withdrawn, this may or may not be possible as the researcher may be unable to extract anonymous data from the database.

Even if the findings from this study are published, we will keep your study information private and confidential. Anyone with the authority to look at your records must keep them confidential.

You can get the answers to your questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, or experience an unanticipated problem, call Pete Kirtland at 813.766.4273.

If you have questions about your rights as a participant in this study or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

Consent to Take Part in this Research Study

I freely give my consent to take part in this study. I understand that by proceeding with this interview and survey that I am agreeing to take part in research and I am 18 years of age or older.

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

Signature of Person obtaining Informed Consent

Date

Printed Name of Person Obtaining Informed Consent

Peter W. Kirtland

APPENDIX E:

SOLICITATION TO PARTICIPATE REQUEST FOR EDUCATIONAL RESEARCH

PARTICIPANTS

We are looking for 15-20 small business owners to participate in a research study targeted at observing and evaluating how decisions are made regarding the adoption of workplace retirement plans. The candidate must meet the following criteria:

- Own a small business with 10-50 employees; and
- Not currently offer a workplace retirement plan to their employees

There is no cost to, or compensation for, the participant. The study will consist of a brief 15-20 minute interview, where the participant will be asked basic questions about their business, focusing on the attraction and retention of employees. This will be followed by a brief education on the types of retirement plans available to small business owners, followed by up to 6 brief survey questions.

We will not ask for, nor record/store, any personal or confidential information. The study is being conducted as part of dissertation for the Muma College of Business at the University of South Florida. The results of the study will be made available to all of the participants.

APPENDIX F:

CODING SCHEME

Those in bold are identified after conducting the interviews. My themes are as follows:

Adaptive Default Nudge

- Comfort of guidance
- Counseled
- More informed

Employee Attraction & Retention

- Benefits offered
- Compensation
- Bonuses**
- Cost of losing an employee
- Culture**
- Employee criticality to success
- Quality of Employee

Employee engagement

- Personal financial stress

General Business Themes

- Biggest challenges**
- Regrets**
- Why did you start your business**

Information Asymmetry

- Administrative burden**
- Costs
- Fiduciary liability
- Financial advisor relationships
- Plan types

Workplace retirement plans

Are employees asking for a plan

Financial literacy

Why don't you have a plan

Employees living check to check

Self interest

Timing

APPENDIX G:

INTERVIEW RESULTS GRIDS

Pilot Interview Results Grid

PILOT INTERVIEW		A	B	C	D
1	Would you be willing to pay in excess of \$3,000 per year	No	Yes		
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	How important is easy of account portability	Very Important	Somewhat	Not Important	
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
	Answers:	Points	Nudge Selection	Participant Selection	
1	401k	2			
2	SIMPLE IRA	5			
3	PD IRA	6	X	X	
4	No Plan	3			
		A	B	C	D
1		2,3,4	1,2,3,4		
2		4	3	2,3	1,2,3
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		3	1,3	1,2,3	
7		2,3,4	1,2,3		

Interview 1 Results Grid

INTERVIEW 1		A	B	C	D
1	How much would you be willing to pay in admin fees	\$0	<\$1,000	>\$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	How important is easy of account portability	Very Important	Somewhat	Not Important	
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
	Answers:	Points	Nudge Selection	Part Selection	
1	401k	4			
2	SIMPLE IRA	5	X	X	
3	PD IRA	5			
4	No Plan	3			
		A	B	C	D
1		2,3,4	1,2,3	1,2,3	
2		4	3,4	2,3,4	1,2,3,4
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		3	3,4	1,2,3,4	
7		2,3	1,2,3		

Interview 2 Results Grid

INTERVIEW 2		A	B	C	D
1	How much would you pay annually for administration	\$0	Less than \$1,000	More than \$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No	Not Important	
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
	Answers:	Points	Nudge Selection	Participant Selection	
1	401k	6	X	X	
2	SIMPLE IRA	4			
3	PD IRA	2			
4	No Plan	1			
		A	B	C	D
1		2,3,4	2,3	1	
2		4	3,4	2,3,4	1,2,3,4
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

Interview 3 Results Grid

INTERVIEW 3		A	B	C	D
1	How much would you pay annually for administration	\$0	Less than \$1,000	More than \$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No		
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
Answers:		Points	Nudge Selection	Part Selection	
1	401k	3			
2	SIMPLE IRA	5			
3	PD IRA	6	X	X	
4	No Plan	3			
		A	B	C	D
1		2,3,4	2,3	1	
2		4	3,4	2,3,4	1,2,3,4
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

Interview 4 Results Grid

INTERVIEW #4		A	B	C	D
1	How much would you pay annually for administration	\$0	Less than \$1,000	More than \$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No		
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
Answers:		Points	Nudge Selection	Part Selection	
1	401k	3			
2	SIMPLE IRA	5			
3	PD IRA	5	X	X	Tie breaker
4	No Plan	4			
		A	B	C	D
1		2,3,4	2,3	1	
2		4	3	2,3	1,2,3
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

Interview 5 Results Grid

This participant opted not take the polling questions stating his employees would have not desire to participate in a plan due to age and turnover.

Interview 6 Results Grid

INTERVIEW #6		A	B	C	D
1	How much would you pay annually for administration	\$0	Less than \$1,000	More than \$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No		
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
	Answers:	Points	Nudge Selection	Part Selection	
1	401k	4			
2	SIMPLE IRA	6	X		
3	PD IRA	5		X	
4	No Plan	1			
		A	B	C	D
1		2,3,4	2,3	1,2,3	
2		4	3	2,3	1,2,3
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

Interview 7 Results Grid

Interview participant 7 owned a bar, and stated the employees live check to check and he replace 4-5 people a week and there was no way a retirement plan would make sense for his business.

Interview 8 Results Grid

INTERVIEW #8		A	B	C	D
1	How much would you pay annually for administration	\$0	Less than \$1,000	More than \$1,000	
2	How many hours per year	0	up to 5	6-10	>10
3	How much would you be willing to contribute	\$0	Up to 3%	> 3%	
4	How much would you like your employees to contribute	\$0	Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No		
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
Answers:		Points	Nudge Selection	Part Selection	
1	401k	1			
2	SIMPLE IRA	5			
3	PD IRA	7	X	X	
4	No Plan	2			
		A	B	C	D
1		2,3,4	2,3	1,2,3	
2		4	3	2,3	1,2,3
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

Interview 9 Results Grid

INTERVIEW #9		A	B	C	D
1	How much would you pay annually for administration		0 Less than \$1,000	More than \$1,000	
2	How many hours per year		0 up to 5	6-10	>10
3	How much would you be willing to contribute		0 Up to 3%	> 3%	
4	How much would you like your employees to contribute		0 Up to \$5,500	Up to \$12,500	Up to \$19,000
5	Are you willing to take on Fiduciary Liability	Yes	No		
6	Would you want to be able to automatically enroll employees	Yes	No		
7	How much would you be willing to pay to terminate	Nothing	Up to \$5,000		
Answers:		Points	Nudge Selection	Part Selection	
1	401k	5			
2	SIMPLE IRA	7	X		
3	PD IRA	5		X	
4	No Plan				
		A	B	C	D
1		2,3,4	2,3	1,2,3	
2		4	3	2,3	1,2,3
3		1,3,4	1,2	1	
4		4	1,2,3	1,2	1
5		1,2,3	2,3,4		
6		1,2	1,2,3		
7		2,3	1,2,3		

APPENDIX H: CODING OCCURRENCES

Code Name	Interview #								
	1	2	3	4	5	6	7	8	9 Pilot
Adaptive Default Nudge			X						X
Counseled			X	X					X
Comfort of Guidance			X						
More Informed		X	X						
Employee Attraction/Retention		X			X				
Benefits Offered	X	X	X	X		X			X
Compensation						X	X		X
Bonuses	X	X				X			
Cost of Losing an Employee	X	X	X		X	X	X	X	X
Culture	X	X	X						
Employee Criticality to Success	X	X		X	X	X		X	X
Quality of Employee	X	X	X	X		X			X
Employee Engagement									
Personal Financial Stress			X						
General Business Themes									
Biggest Challenges	X				X			X	
Regrets			X						
Why Did You Start Your Business		X	X	X	X	X	X	X	X
Information Asymmetry									
Administrative Burden	X	X		X					X
Costs	X		X			X		X	X
Fiduciary Liability	X		X	X					X
Financial Advisor Relationships		X		X					
Plan Types									X
Workplace Retirement Plans									
Are Employees Asking for a Plan		X	X	X	X	X			X
Financial Literacy		X							X
Why Don't You Have a Plan	X		X	X					X
Employees Living Check to Check						X	X		
Self Interest						X			
Timing			X						X

APPENDIX I:

DILBERT CARTOON PERMISSION USE

From: [Raegan Carmona](#)
Sent: Tuesday, November 19, 2019 10:42 AM
To: [Pete Kirtland](#)
Subject: RE: Licensing Question

Dear Pete,

Thank you for your request to use a Dilbert cartoon in your dissertation. Since this is an educational use, you may use the cartoon at no charge. Please refer to our educational policy: <https://licensing.andrewsmcmeel.com/classroom-usage>.

If you need a copy of the cartoon we charge \$15.00 USD per cartoon.

Thank you for your interest in our cartoons.

Best regards, Raegan Carmona

[Raegan Carmona](#) | Permissions Manager



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<https://licensing.andrewsmcmeel.com/>