# Shallow Review of Upgrading EAs



### **Donate Tomorrow: Overview**

Donate Tomorrow (DT) is inspired by the Save for Tomorrow, Tomorrow (STT) program. It is explained best in this TED talk: https://www.ted.com/talks/shlomo\_benartzi\_saving\_more\_tomorrow?language=en. The idea is to increase people's savings rates while not triggering loss aversion. To have them feel like they keep getting more money to spend, even as they are saving more and more of their income.

This is accomplished by committing them to saving a certain percentage of their future income raises. For example, say their current salary is \$40,000 and each year they get a \$2,000 raise. They would commit 20% of every raise up until a set amount, let's say 20% of their income. So come December when they get a raise, they would get paid \$40,000 + 80% of their raise, so \$1,600, and would save the remaining \$400. Thus they are still spending more money

on themselves than they did last year, but they are also saving more. This is all done automatically so they never see the \$400, but it goes straight to their savings account.

The idea of DT would be to set up this system except for donations instead of savings.

### Research

When people did STT people went from saving 3% of their income to 13% over four years.

Somebody ran a study (http://www.sciencedirect.com/science/article/pii/S0047272711000764) where they asked people to increase their monthly giving either now, or in two months. Those asked to increase their giving later gave 33% more than the control group. This was not associated with pay raises or doing it each year automatically, but is related.

As for the technicalities of setting up this system, payroll deductions simply a thing of asking employer to set it up. They are fairly common in the charity sector (here's an example). Here is an example of a charity: http://www.calgaryunitedway.org/main/sites/default/files/how\_to\_set\_up\_payroll\_deductions\_.pdf.

### **Success Rates**

STT had a sign up rate of 25% at one company when all they did was send a single letter to each employee and put some posters around the company. Looking at the recorded instances of this being set up, the signup rate hovered between 15% and 50%.

# How common is it?

It is probably entirely innovative. I got in contact with the founder of STT to ask him if there was anybody else doing this, and he said that there was nobody.

# How does it suit our organization?

In some ways it suits us and in other ways it doesn't. It suits us because we have an already established community of people who believe it is their ethical obligation to give more away to charity than is normal. It doesn't suit us because most of that audience works at different companies, and we would very likely have to set this up as a new system at each company. They are also a demographic that is highly likely to move companies quite frequently, so that they would have to set up the automatic system at each new company.

# **Relevant Comparisons**

#### THE FURTHER PLEDGE

Giving What We Can has a Further Pledge, where people pledge to donate anything above a certain income. This is similar to DT because people would be committing to donate a certain percentage of each pay increase. The Further Pledge does not have that many pledgers.

Some differences might be that the Further Pledge is a commitment to never making more money, whereas with DT you would always be making more money while simultaneously donating more as well. Additionally, the Further Pledge is not very well advertised so it makes sense that there would be less people who committed.

#### THE PLEDGE TAKEN DURING UNIVERSITY

The Giving What We Can pledge is often taken by university students who currently make nothing but will make much more in the future. This is rather similar because they will make more and donate more in the future, so it psychologically just feels like a win to them. It's different in that the pledge has no teeth and people are prone to forget or suffer a willpower break. DT on the other hand, would benefit from people forgetting as it is an automatic process. The pledge acquired 1100 members since it started in 2009.

# **Best Ways to Run an Experiment**

#### **APPROACH 1 - PROMOTE A GUIDE**

Write a step-by-step guide on how to set it up at your office, then post it on the EA channels with a link that allows us to see how many people sign up. This would be exceptionally easy to set up. The cost would be that it would practically guarantee the lower bound of expected value, which would hover around zero.

#### **APPROACH 2 - HELP PEOPLE SET IT UP**

Write a step-by-step guide and post it on the EA channels with a link that allows us to see how many people sign up. Do an email heavy promotion of it. Individually Skype with and email people signed up and do the paperwork for them. Find out how much they were donating before so we can know whether what we're doing is working. Only promote it for two months and have a limited time offer of helping people set it up (say only help up to 50

people to set it up), just to get enough people participating to learn about whether it works or not. If it goes well, then we can keep doing it.

This takes more time but would guarantee that we gave the idea a fighting chance and also made it so that we would know if it was working.

#### **BEST SUGGESTED WAY**

I would suggest Approach #2 because the idea behind minimum viable projects is that they are past the threshold of being viable, and the first approach would not be viable. In Approach #1 I would be shocked if more than one or two people signed up, which wouldn't be enough information to see whether it worked, and I put the bulk of the probability on nobody signing up at all.

# **Expected Potential**

### \* Costs for MVP

- Monetary
  - \* \$0-\$2,000. Best guess free. It's almost all promotional and staff. Requires virtually no physical resources or services
- \* Time
  - \* Setup = 320 hours or 2 months of one person, full time
    - \* 40-120 hours. Best guess 80 hours on researching legal issues
    - \* 20-120 hours. Best guess 40 hours writing up guide or coming up with process
    - \* 40-120 hours. Best guess 80 hours on promotions
    - \* 100-500 hours. Buest guess 150 on guiding individuals through process
    - \* Total: 200-860. Best guess 350 hours.
    - \* \$12 hour of staff time
    - \* Total cost: \$2,400 \$10,320. Best guess \$4,200.
  - \* This might all change if Save More Tomorrow can just make minor tweaks and give us the system already set up. I put a 5% chance on this happening. I talked to the founder and they said they'd love to see it done, but then stopped communicating with me, so they are unlikely to be very involved.

#### Benefits of MVP

- 95% confidence interval
  - \* Number of people who sign up over 1 year: 0-50. Best guess 8
  - \* Amount extra people give over four years: 50% 200% out of on average \$5,000. Best guess 75%
    - \* The average amount donated per year according to the EA survey was \$8,900. I lowered this a fair amount to take into account the fact that we

probably won't get millionaires to participate, and the average is very skewed by a few high net worths.

- \* Lower bound over four years: 0\*(0.5\*5,000)=**\$0**
- \* Higher bound over four years: 50\*(3\*5,000)=\$750,000
- \* Best guess over four years: 8\*(0.75\*5,000) = \$30,000

### \* <u>Net</u>

Pessimistic: 0-10,320 = -\$10,320
Optimistic: 750,000-2,400 = \$747,600
Best guess: 30,000-4,200 = \$25,800

#### \* Ratio

\* Pessimistic: 0/10,320 = 0:1

Optimistic: 750,000/2,400= 312:1
Best guess: 30,000/4,200 = 7:1

# Some additional factors that were hard to incorporate into the calculation

#### COMPANIES MIGHT NOT BE INTERESTED/CAPABLE

Setting up this system may be much much harder than I expect. It could be that the company would have to change their financial software completely, or that each company has such different systems that we would have to make a completely new program for each one.

#### POTENTIALLY HIGE UPSIDE

This could also have a very large upside that I'd put a less than 5% chance on, which is why it is not in my 95% confidence interval. However, there is a potential chance that many people would sign up, and that there average donation could be quite a lot higher than \$5,000. For example, if this was set up a few financial companies, that could move substantially more. Potentially over a million in a few years.

# **Subjective Sense**

#### CONSIDERATIONS FOR

### It Helps Solve Follow-Through in the EA Movement

A current problem in the EA movement is follow-through. There is a lot of talking about donating 10% or more, yet a lot of people drop off the map after they've committed.

#### It Meets the \$100k and \$1 million benchmarks

It has the potential to raise over \$100k in the near term, and raise over a million in the longer run.

#### **CONSIDERATIONS AGAINST**

### Planning Fallacy is Definitely At Play

Even though I tried to be as pessimistic as I could for my lower bound, it's very likely that it will be a lot harder than I imagine. There are a lot of unknown unknowns.

### It is Innovative and Thus Higher Risk

Since it's never been done before it is much more likely that it will flop. On the other, since it's never been done before, there's also a higher potential upside due to all the low hanging fruit still being there.

### Our Demographic May Not be the Best Fit for it

STT was done on blue collar workers who worked for the company for many many years. Our demographic is much more likely to move between companies multiple times, especially to get pay increases. This would mean that each time they move companies they'd have to set up the system again, which would massively increase drop out rates. Another problem our demographic has is that they don't work at any particular company, but at a large diversity of companies, so we'd have to set it up at each new company.

### **Teasing out Counterfactuals**

It would be nearly impossible to do an RCT initially. We would simply have to do a beforeafter study, which are less reliable.

# **Subjective Sense**

I think this is a middling to high promising project. It has high potential, a fairly decent best guess, and has some studies on a very similar project.

### **Further Research**

#### What do we not know?

- How hard it is to set up
- \* How much it would vary from company to company
- Whether we'd have to use special programming or something to set it up

# How much more research it might take (if any) to feel confident?

\* Probably 40 more hours of research to feel very confident.

# **EA Loans for Programming Bootcamps: Overview**

What I cover specifically in this report is giving loans to EAs to do programming bootcamps. Bootcamps are where people with little to no prior skills go for an intensive training regime, often taking people from zero programming knowledge to being able to get a programming job at the end of a few months.

The idea behind an EA loan would be to give loans at low or no interest to EAs to go to programming bootcamp, under the condition that they donate a certain percentage of their income for a certain period of time once they get their first job.

I did not research this as thoroughly as other reports because I did a quick calculation of how many people would have to take out loans and how much they would have to counterfactually donate for it to reach the \$100,000 mark, and it seemed very unlikely to do so. One of the criteria we are using for selecting interventions is how likely it is to raise more than \$100,000.

# **Expected Potential**

#### **Factors**

- First year's average salary programmer, entry level \$45,000 (\$61,000 USA)
- \* How many people would donate who wouldn't have otherwise. This is an important number, because many people who would apply for such a loan would probably donate anyway: 5%-70%. Best guess 10%
- \* How many people would sign up? (ie. How many people would need a loan instead of just using their own money?): 5-20. Best guess 8.
- \* Average percent donated: 7%-10%. Best guess 9%.
- \* Quick amount raised (not counting costs) estimate = (number of people who sign up)\*(average first year programmer salary)\*(% of people who wouldn't have donated this amount without the loan)\*(% of income donated on average)\*(
  - \* Optimistic: 20\*61,000\*0.5\*0.10 = \$61,000
  - Pessimistic: 5\*61,000\*0.05\*0.07 = \$1,067
  - \* Best guess: 8\*61,000\*0.1\*0.09 = \$4,392
- \* How many people would have to sign up with 10% of people counterfactually donating 10% to get to \$100,000?
  - \* 61,000\*.1\*.1\*x=100,000.
    - 164 people.
  - \* 30% counterfactual
    - 55 people
  - \* 50% counterfactual
    - \* 32 people

- \* What about if we made it so people had to donate for two years first?
  - \* That still means that with 10% counterfactual, you would need 82 people.
  - \* 30% counterfactual
    - \* 28 people
  - \* 50% counterfactual
    - \* 16 people

Having 50% of people donate counterfactually seems unrealistic to me. My best guess would be 10-20% of people because most people who would a) be able to get the loan and b) who would want the loan, would be the sort of people who would donate regardless. The sort of people who would be able to get a loan would be more competent and trustworthy, so more likely to get a loan from another medium or learn the skills on their own. The sort of people who want the loan are also the sort of people who are already fairly interested in EA and thus are more likely to follow through.

# **Subjective Sense**

#### CONSIDERATIONS FOR

- 1. Donors could just re-use the money again and again, since people would pay back the loan.
- 2. It could make sure that people get into the habit of donating 10% for the first year or two, instead of perpetually putting it off.

#### **CONSIDERATIONS AGAINST**

- 1. Not that many people who would need a loan. Lots of bootcamps are free for those who are good enough to get accepted
- 2. Counterfactuals would be very difficult to find. It would take forever to get a big enough sample to know whether it's effective or not.
- 3. Helping EAs is not neglected. It's like helping people go to the opera. It will probably get taken care of regardless of us, so the counterfactuals are low. Additionally, EAs tend to come from well off backgrounds, so they're much less likely to need a loan.

# **Overall Subjective Sense**

I put a smaller than 2.5% chance that EA loans would raise more \$61,000. I don't have a strong sense of the other interventions yet, but I suspect this one won't be the intervention that is in our top 5.

# **Commitment Devices for Donating: Overview**

Commitment devices are a way to beat weakness of will, and they function a little bit like school. Most people want to learn new things, but often left to their own devices they will binge-watch Netflix instead of learning statistics, because Netflix is more immediately gratifying. In school though, you will be punished for not learnings stats by receiving a failing grade. This makes it more immediately important to do something that will help you in the long run. Commitment devices take advantage of that quirk of human psychology, by having people voluntarily sign up to have this potential of unpleasantness if they don't follow through with their long term goals. This is usually in the form of having to pay money if they don't do what they ultimately want to do.

### Research

The different commitment devices that I consider are:

- \* Beeminder
- \* Stickk
- \* Making a Facebook app specifically for EAs

#### **BEEMINDER**

With Beeminder you set a goal, you report on how well you do (it's based on an honor system), and if you derail you pay them \$5. If you fall off track again, you pay \$10, and it goes up and up until you are truly motivated to stay on track. I use this for my personal life with great success, but it is set up for habits rather than one-off achievements, which donating would be. It only has weekly goals, rather than yearly ones. I've ruled it out for these purposes, but you should use it for your own personal goals anyway!

#### STICKK

Stickk is an organization invented by one of the founders of IPA and it works similarly to Beeminder except for a few key features:

- \* You can set one-off commitments. It's not as good as having yearly commitments, but it is better than only having weekly commitments.
- \* Your money goes to a charity that you really don't want the money to go to, like a charity that lobbies against gay marriage or a climate change denier charity.
- \* You can set up a "referee" who has to sign off that you did indeed complete your goal, so it's less easy to weasel out of the commitment.

#### **FACEBOOK APP**

The Facebook app would be such that the "punishment" wouldn't be monetary, but embarrassment. People would commit to donating a certain amount, and if they didn't follow through, the app will post on their timeline that they didn't donate. Depending on how many people sign up, this could also not be a Facebook app, but simply a manual service, where an individual just messages people coming up to the due date, then posts on their wall if they don't get a receipt proving they've given.

# **Legal Contract**

A legal contract would make it so that people are legally obligated to donate. I talked to a lawyer about this, and they said that it wouldn't be possible to make the contract binding, thus losing most of its power. I stopped investigating this option after discovering this information.

### **Success Rates**

I could only find three studies on this sort of device:

- \* One randomized controlled trial found that access to a commitment device increased the rate at which smokers succeeded in quitting after 6 months by 40%. This was only a 3 percentage point increase however. Of those offered to join the program, 11% signed up.
- \* A program offered to set people up in a commitment device that made them save for their children's education. There was a 39% signup rate among those who were offered the program.
- \* A weight loss group with a deposit contract lost 20 lbs compared to the 12lbs of the control group
- \* According to Stickk's figures, 78% of users who put money down achieved their goals, as compared to only 35% who put no money down. This was just an observational study rather than an RCT.

One thing that's quite different about these studies compared to what we would be setting up the commitment contract to, is that every one of these areas people know that they're failing to do what they want to do. Most people want to lose weight and feel bad that they've failed. This is very different from donating. In my experience, EAs who don't donate when they intended, say that they've decided rationally to donate later rather than now, that they thought it was more rational to pay to self-improve now, etc. I don't think I have met a person who feels that they should have donated but failed to do so. If people are unaware

that it's a willpower issue, or if it's genuinely not a willpower issue, which I'm sure it is for some people, then people will not signup.

Additionally, two of the three studies were done on something for their own self-interest, which would probably motivate people more than helping others, generally speaking.

On the other hand, the signup rate might higher for EAs because they are more interested in productivity hacks.

### How common is it?

As far as I know, this hasn't been done before for donating. It's been for things like smoking, losing weight, and savings.

# Does it suit our organization?

It would slightly benefit from being a smaller organization because the more people who join, the more work we have to do. It could be also be a very good volunteer project.

# **Relevant Comparisons**

### **DONOR ADVISED FUNDS (DAF)**

DAFs are financial tools where you can donate in the present, get a tax deductions for that year, then they can decide at any point in the future which charity they want the money to go towards. The money, once in the DAF, legally has to go to a registered charity, so it is a form of a commitment device. EAs who might like commitment devices would be the sorts who set up a DAF so that they end up actually donating. On the other hand, it might not be as relevant because DAFs are quite a bit more time consuming to set up compared to Stickk.

I looked at EA survey and found about 5 people out of 786 self-described EAs who took the survey donated to a DAF. That is 0.6%. If that number is representative, and there are about 6,000 EAs (I came to this number by looking at the number of people who are part of the EA Facebook group), that would mean roughly 36 people probably have DAFs set up. This should affect how many people we think would sign up for the commitment devices.

#### **PLEDGE**

The Giving What We Can pledge is a mild commitment device. It is publicly telling people that you intend to donate 10% or more of your income. However, it doesn't have any teeth, so there's no chance that anything bad will happen if you don't follow through. So, how many

people take the Giving What We Can pledge? The survey says 20% of self-described EAs take it. That would mean that 1,200 EAs have taken the pledge if there are 6,000 EAs.

#### **SHOP FOR CHARITY**

80 installed the extension with minimal outreach. This means we can expect maybe 10 to install Facebook app because Shop for Charity is much easier and at no cost to them, whereas the Facebook app is painful if they fail and for something a lot of people think they don't need.

#### **BEEMINDER FOR REGULAR GOALS**

A very relevant example is whether the EA community uses Beeminder to begin with. EAs are more altruistically motivated, but virtually everybody wants to exercise regularly and has some troubles staying motivated, so if they don't use Beeminder for exercise or other self-interested habits, they probably won't use it for altruistic donations.

I surveyed the people at the office, who all know a large number of EAs, and asked how many people they knew outside of our office who used Beeminder. Tom knew maybe one. Kieran didn't think he knew anybody. Joey and I knew four, one of which was the same person Tom knew. That's out of about probably around 100 EAs we know collectively well enough to know whether they use Beeminder, so about 5%. Out of 6,000 EAs, that would be about 300 people.

# **Expected Potential**

#### **STICKK**

#### **Benefits**

- Number of people who sign up: 0-80. Best guess 20
- \* Percent of people who then donate when they wouldn't have otherwise. 10% 45% out of on average \$5,000 (average from EA survey was \$8,900 and arbitrarily lowered it a lot to take into account the fact that we probably won't get millionaires to participate). Best guess 15%.
- Lower bound over 1 year: \$0
- \* Higher bound over 1 year: 80\*(.45\*5,000)=**\$180,000**
- \* Best guess over 1 year: 20\*(0.15\*5,000) = \$15,000

#### Costs

- \* 3 15 hours to write a guide. Best guess 5 hours
- \* 2 15 hours to fancy it up as a PDF and put it in mailchimp, etc. Best guess 7
- 20 120 hours to promote it via email, facebook, EA forum, etc. Best guess 40

- \* 5-20 hours to be somebody's referee. Probably could give as a thing to a VA. Best guess 8.
- \* Lower bound: (3+2+20+5)\*12/hour = \$360
- \* Highest bound: (15+15+120+20)\*12/hour = \$2,040
- \* Best guess: (5+7+40+8)\*12/hour = \$720

#### Net

- \* Lower bound: 0-2,040 = -**\$2,040**
- \* Highest bound: 180,000-360= \$179,640
- \* Best guess: 15,000-720 = **\$14,280**

#### Ratio

- \* Lower bound: 0/2,040 = 0:1
- \* Highest bound: 180,000/360 = 500:1
- \* Best guess: 15,000/720 = **20:1**

#### **FACEBOOK APP**

#### **Benefits**

- Number of people who sign up:0-70. Best guess 10
- \* percent of people who then donate when they wouldn't have otherwise. 10% 50% out of on average \$5,000 (average from EA survey was \$8,900 and arbitrarily lowered it a lot to take into account the fact that we probably won't get millionaires to participate). Best guess 15%.
- \* Lower bound over 1 year: \$0
- \* Higher bound over 1 year: 70\*(.5\*5,000)=\$175,000
- \* Best guess over 1 year: 10\*(0.15\*5,000) = \$7,500
- \* Random benefit ops funding might be easier to get because a lot of our ops donors appreciate helping the EA community grow and become stronger.

#### Costs

- \* Time to program the app: 7-300 hours. 100 hours best guess.
- \* Time to promote it via email, facebook, EA forum, etc. 10 30 hours. Best guess 15 hours.
- No financial costs
- \* Lower bound: (7+10)\*12/hour= \$204
- Higher bound: (300+30)\*12/hour = \$3,960
- \* Best guess: (100+15)\*12/hour = \$1,380

#### Net

- \* Lower bound: 0-3960 = **-\$3,960**
- \* Higher bound: 175,000-204 = \$174,796
- \* Best guess: 7,500-1,380 = **\$6,120**

### Ratio

\* Lower bound: 0/3960 = 0:1

\* Higher bound: 175,000/204 = 857:1

\* Best guess: 7,500/1,380: **5.4:1** 

# **Subjective Sense**

My subjective sense is that we could do this as a Charity Science project, but I suspect it would be better to put the idea out there, particularly to .impact, and see if anybody would like to do it as a volunteer project. It seems well-suited to somebody who would like to use their programming knowledge to volunteer.

#### CONSIDERATIONS FOR

- 1. It helps solve the problem of EAs following through.
- 2. It has a ready-made target market.

#### **CONSIDERATIONS AGAINST**

- 1. People who have the need won't necessarily see the need.
- 2. Similar things haven't had enormous signup rates and they were much more toothless or more in the person's self-interest.

### **Further Research**

If we were to investigate this more, I would research the below uncertainties:

- How difficult would it be to program?
- How difficult would it be to find somebody to set it up?
- How would we measure its impact?

# References

- 1. https://www.ted.com/talks/shlomo\_benartzi\_saving\_more\_tomorrow?language=en
- 2. http://www.anderson.ucla.edu/faculty/shlomo.benartzi/smartjpe226.pdf
- 3. http://www.sciencedirect.com/science/article/pii/S0047272711000764
- 4. http://www.calgaryunitedway.org/main/sites/default/files/how\_to\_set\_up\_payroll\_deductions\_.pdf
- 5. http://effectivealtruismhub.com/sites/effectivealtruismhub.com/files/survey/2014/results-and-analysis.pdf
- 6. http://www.payscale.com/research/CA/Job=Computer\_Programmer/Salary/a4d54e3f/Entry-Level
- 7. http://www.indeed.com/salary/q-Software-Developer-Entry-Level-l-United-States.html
- 8. https://www.aeaweb.org/articles.php?doi=10.1257/app.2.4.213

- 9. http://karlan.yale.edu/p/LooseKnots%202013-12.pdf
- 10. https://en.wikipedia.org/wiki/StickK#cite\_note-bostoncom-11

