



By Whitney Brooks

# Present Investment

---





# Artist Statement



Imagine a future in which solar energy acts as a new commodity, like gold and silver, to be collected and used as a tool to build wealth. It highlights a speculative or wearable accessory designed to collect solar energy, known as a Replo, to provoke thoughts about new methods of saving money and resources for an uncertain future.

My primary and secondary research, on both the financial crisis of 2008 and financial literacy education in predominantly African American communities, found the assumption that African Americans ages 17-22 make risky financial decisions and have difficulties with wealth management led to an increased wealth gap in the United States. This space is meant to counter the sense of alienation that young African Americans feel in spaces reserved for financial planning, evoking inspiration from the high-end jewelry exhibitions of Tiffany and Cartier coupled with speculative projects like Dunne and Raby's Hydrogen Future to aid in the critique surrounding existing social norms.

# INTRODUCTION



In the beginning of the pandemic, my brother suggested that I begin investing in stocks alongside him as a pastime during the lockdown. Once I began to take it seriously, I experienced a deep sense of security by building wealth for an unpredictable future. Not only did I focus on buying fewer, but higher quality products. I learned more about business and how investing plays a larger role in our financial system, what assets we should aim to acquire and what liabilities we should aim to limit. I have come to realize that many African Americans in the United States aren't uninterested in building wealth, they aren't necessarily interested in the traditional and elitist ways of achieving it, like with stocks in bonds in public and private companies. These modes of investment often require thousands of dollars for an initial investment like with many bonds or they require an extensive

understanding of balance sheets and identifying trends in a company's success over a long period of time. But after conducting research commodities (like gold, silver and artwork) are of interest because of their tangibility, their ability to be displayed, represent the success the individual has acquired and the range of quality and size that an individual may choose. African Americans ages 17-22 in the United States are labeled as financially risky because they are just entering the workforce and their financial journey, often with conflicting or even a false understanding of the way the financial system works, leading to early debt and difficulties supporting themselves and their families later on in life. This just reinforces the financial inequalities between social classes in the United States.

ROBERT SKIDELSKY &  
EDWARD SKIDELSKY

# HOW MUCH IS ENOUGH?

Money and the Good Life



'A crisp and pungent book ... a wake-up call'  
ROWAN WILLIAMS, *PROSPECT*



The main purpose of the book *How Much is Enough?* is to attempt to explain that it's possible to live a good life in some finite way, contradicting the ideas surrounding endless economic growth and consumerism. As it pertains to my project, I initially used it to determine if the user should have a definitive monetary goal and the formula that would be implemented for each user. For one of my first prototypes, I created a balloon enclosure that inflates and deflates depending on how close the user is to their savings goal. The balloon provided a unique opportunity to visualize an approximation of the goal giving the user the impression that the focus should be on the goal relatively and ultimately it's up to them to determine when it is enough.

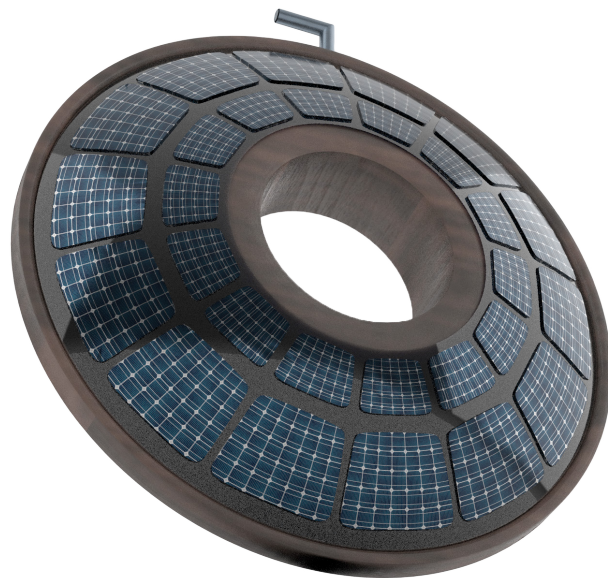
My solution at the end of semester one was a two part tool. It included an app to keep track of your goals, control the balloon enclosure, and provides a plug in to keep you aware of how your spending affects your saving goals and a tabletop device that physically displays how close you are to reaching your goal. My main priority was creating a positive user experience with this data visualization.





# Prototyping





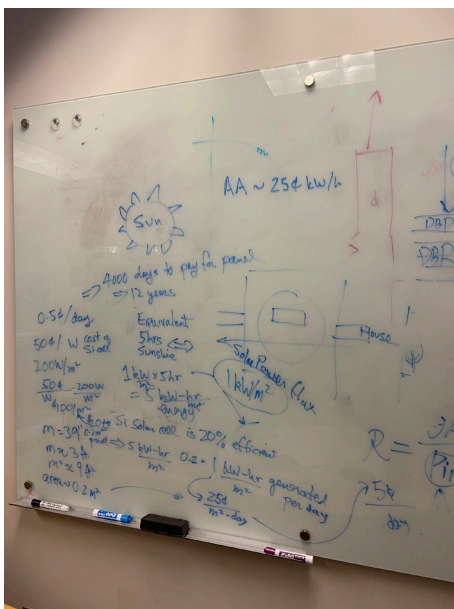
The challenge with the pendant design and the 3d modeling process was a balance of feasibility and desirability. Solar panels are traditionally square, flat panels for simplicity in manufacturing and to maximize available surface area. I had to keep in mind that the more complex the surface of the solar panel was, the more difficult it would be to manufacture (in theory). That's why I added slight curvature to the panels and more to the surface they're mounted on.

The purpose of this paper, Financial Literacy and the Financial Crisis, is to measure financial literacy in 2009 (after the 2008 financial crisis) in Russia and how a lack of financial literacy negatively affected the country during the international financial crisis of 2008. It highlighted how the lack of financial literacy enables citizens to borrow more money than they could pay back, destroying their credit. Additionally, it highlighted that saving and investing were some of the first lessons individuals need to learn.

Financial Literacy and the Financial Crisis  
 Leora F. Klapper, Annamaria Lusardi, and Georgios A. Panos  
 NBER Working Paper No. 17930  
 March 2012  
 JEL No. D14

**ABSTRACT**

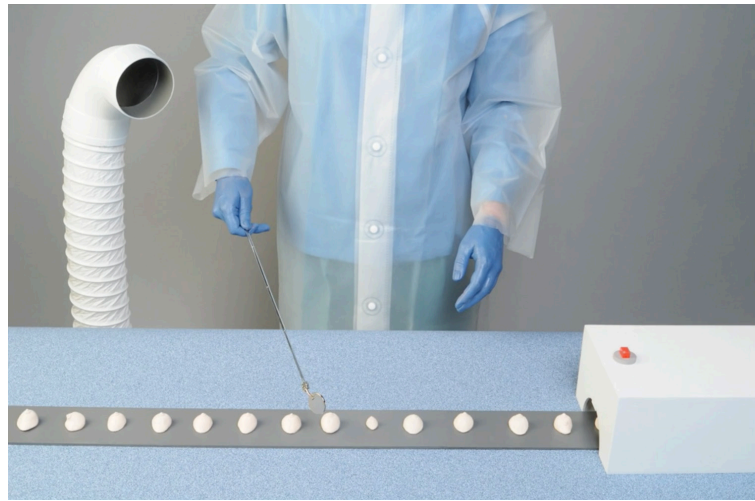
The ability of consumers to make informed financial decisions improves their ability to develop sound personal finance. This paper uses a panel dataset from Russia, an economy in which consumer loans grew at an astounding rate - from about US\$10 billion in 2003 to over US\$170 billion in 2008 - to examine the importance of financial literacy and its effects on behavior. The survey contains questions on financial literacy, consumer borrowing (formal and informal), saving and spending behavior. The paper studies both the financial consequences and the real consequences of financial illiteracy. Even though consumer borrowing increased very rapidly in Russia, the authors find that only 41% of respondents demonstrate understanding of the workings of interest compounding and only 46% can answer a simple question about inflation. Financial literacy is positively related to participation in financial markets and negatively related to the use of informal sources of borrowing. Moreover, individuals with higher financial literacy are significantly more likely to report having greater availability of unspent income and higher spending capacity. The relationship between financial literacy and availability of unspent income is higher during the financial crisis, suggesting that financial literacy may better equip individuals to deal with macroeconomic shocks.



Stephen R. Forrest, a Peter A. Franken Distinguished University Professor of Engineering with a focus in physics, gave me a step by step explanation of what it takes to offset housing costs through your at home meter including material costs and feasibility. Unfortunately, I learned that the most efficient solar panels available today are only capable of capturing up to 22% of solar energy and would take a long period of time to generate a sizable income but it does encourage the audience to think about whether this is a goal to strive for.



Inspiration: Emily Hayes' "Manufacturing Monroe: Quality Control" (2011) presents a future factory that "exploits tissue engineering to grow and manufacture products that contain celebrity biopresence. I looked to this example for guidance on the level of fidelity my future scenario required and how to alter the desirability for public interest. Furthermore, it successfully begs the question: Even if this is feasible, should we steer away from this direction?"



Inspiration: "E. Chromi: The Scatalog" (2009) by Daisy Ginsberg and scientists at Cambridge University "genetically engineered bacteria to secrete a variety of coloured pigments" and "imagines using it for cheap, personalized disease monitoring" (Ginsberg).

---

# RETHINK SHINOLA

---

“Rethink Shinola” (2015) by Rebekah Modrak is a web-based artwork that “incorporates traditions of just-the-facts-journalism” (Modrak) and addresses the inconsistencies between Shinola’s messaging and its past involving cultural insensitivity.



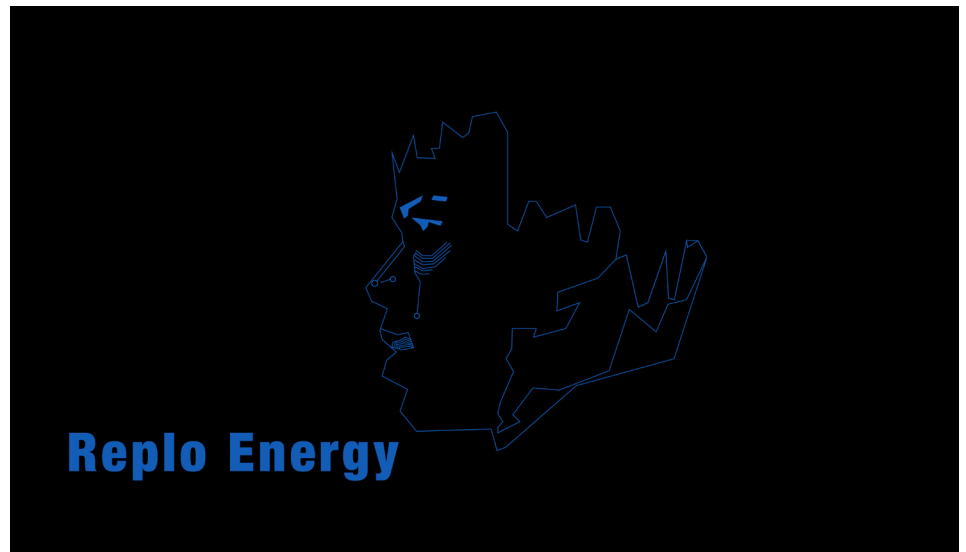
**DTE Energy®**

Examining DTE Energy in the same manner as Modrak with Shinola, I waded to juxtapose my energy company as an alternative to DTE, a current monopoly on the energy sector. By using almost the exact same design language with a different user/motif, I created a pointed contradiction that the audience can immediately pinpoint.

# REPLO Energy



My first logo felt too confrontational for my liking so I decided to incorporate more static movement in the design using the element of line to create more contrast against the dynamic movement in DTE's logo. I learned that proper wall preparation including dusting, smoothing and exact measurements ensure an accurate application.



# Conclusion



Pictured Above: Still from video shown in “The Replo Showroom” installation

In conclusion, I am proud that I was able to learn more about the role that financial literacy plays in our society or the lack thereof. If I were to continue working on this project, I envision it as a pop up shop in a public place where I can invite participants to try on and interact with the prototypes. In fact, given my current knowledge and

feasibility, I would want to incorporate working lights in the prototype and simulate the photovoltaic activity or create a single, large scale installation to spark viewer interest but its actual implementation is still food for thought. For myself, one of my biggest goals that I accomplished was gaining interest of the target audience (young African

Americans in Detroit ages 17-22) in an area that they weren't largely exposed to or is not introduced to in an engaging way. Having just one kid ask “If you made it, could I have one?” for me means that I'm using my skills to benefit their lives in some way, and that's the kind of impact I want to have as a designer.