

Jack Harich
1164 DeLeon Court
Clarkston, GA 30021 US
404.408.0104
Jack@thwink.org

October 2, 2017 – Version 4 – Improved MVP feature set, added Product Name

General Plan for Pushing on the High Leverage Point of Raise Political Truth Literacy

Introduction

The title summarizes what our highest-level strategy is. The PPKB, Candle, and whatever else we come up with are doing one simple thing. They are pushing on the high leverage point of *raise political truth literacy*. That's our fixed guiding star. All our actions need to always keep that goal in mind.

The biggest surprise in my reading of current writing on how to build great user experience (UX) products is that things have really changed since I last consulted in this area. There's now much more depth and detail in the UX creation process. The biggest single new development occurred in 2011 with publication of Eric Ries' *Lean Startup* book. This made conducting validated user research as early in the product development process as possible a make-or-break requirement.

Our problem is we haven't done any validated user research. I've failed so far to develop any relationships with the fact-checking industry, academia, NGOs, or any customers/collaborators. I attribute this to having no credentials plus the new paradigm change resistance phenomenon. But still, we need to engage with real users early in product development.

Where is demand highest for our product? The fact-checking industry, which has at last count 126 organizations producing fact-checks regularly. I can call them up, describe our project, and hopefully engage.

One thing I'd like to do is the same thing Lucas Graves did. He's the author of *Deciding What's True: The Rise of Political Fact-Checking in American Journalism*. Lucas spent two weeks in training and work with a fact-checking organization. At the end he produced fact-checks that were published.

I may be able to do the same thing. **PolitiFact**, the biggest name in the industry, is located in Saint Petersburg, Florida. I have a friend 25 miles away and could stay with him for two weeks. What I would do in addition to training and work is study their process, make friends, and eventually when the opportunity arose, describe our project. Scott may be able to do something similar in California, especially since California is so progressive. California has a PolitiFact branch. So does Georgia.

I would use our own tool in my work if it was good enough, while also seeing exactly how journalists are doing their own fact-checking work. If this occurred, it would demonstrate the advantages of our tool. But for this to happen we need to plan for *phased introduction of our products*. Here's **an outline of the vision and its four phases**:

First comes the one customers need now: something to radically improve the efficiency and quality of fact-checks. My impression is fact-checking goes slowly, there's not much reuse, the process is loose and non-scientific, and the fact-check organizations use different processes. I plan to start entering existing fact-checks into the PPKB to begin to understand this much better. Discovering that we probably need to start here, and not with a better PPKB, was a pleasant surprise.

Second comes the next step after fact-checks, Politician Truth Ratings (PTR). **Third** comes adding features to the online version of the PTR tool so that it expands to what the public is interested in. **Fourth** comes additional solution elements for pushing on the high leverage point, like the Truth Test and Politician Corruption Ratings. The Thwink research identified nine sample solution elements for pushing on the high leverage point.

What will really happen is the phases will evolve, based on continuous user feedback. Our actual phases will probably differ radically from the four sketched above. That's how current UX development works.

Our UX creation process

In the 21st century, all successful UX companies succeed because they followed a *UX creation process* that fit their situation. The days of intuitive product creation, like that used in the early days of the computer industry, are over because all the low hanging fruit has been picked.

Dan Olsen, in his book on *The Lean Product Playbook: How to innovate with minimum viable products and rapid customer feedback*, 2015, presents a battle-tested process for UX product development. But how do you decide what type of product to develop?

That's what the Thwink analysis provides. The analysis identified four root causes of the sustainability problem. Each has a high leverage point to push on with solution elements to resolve the root cause. So we can start with this process. I've added some notes on where we are on executing this process, which is very iterative.

The Four Steps to the Epiphany: Successful Strategies for Products that Win, by Steve Blank, was first published in 2003. The book revolutionized how startups should be managed. They should switch from the linear Product Development Model to being driven by the Customer Development Model. The book was so influential that the 2013 version, which I have, states on page X that "The core ideas of *The Four Steps* have spread from startups to large corporations and the Lean Startup methodology has become the standard for commercializing scientific research in the US." Wow. That's the process we should be using. I'm evaluating it to see how much of the process described below should be changed. This will take a while.

Process Steps

These process steps are just a start. They will take us a long way.

A. Product Conception

1. Determine the correct high leverage point (HLP) by system feedback loop analysis. (The HLP is raise political truth literacy. Note that other UX companies do not take this process approach. We are unique.)
2. Design candidate solution elements with inherently high ability to push on the HLP. (Politician Truth Ratings, Truth Test, etc)

B. The Lean Product Process (Also called Customer Development)

3. Determine your target customer (See below)
4. Identify underserved customer needs (See below)
5. Define your value proposition (See below)
6. Specify your minimum viable product (MVP) feature set (See below)
7. Create your MVP prototype (To do, this is what William wants to do. As the product(s) mature, this step morphs into create the product.)
8. Test your MVP with customers (To do. This tests product/market fit. The hard part is finding customers to work with. As the product(s) mature, this step morphs into test the product.)

The end point of our process

In our case we're not trying to start a typical company. We're trying to raise interest in the need for PTR at the national level, in the US and elsewhere. Strong interest should result in someone from our customers stepping forward and wanting to make PTR grow as fast as possible, by starting or growing some sort of organization. How that will happen we don't know. The more we engage with customers and the longer we do that, the clearer where we are going will be.

Process Step 3. Determine your target customer

The product is Politician Truth Ratings (PTR). We have several product users:

1. **PTR producers.** This will evolve, probably beginning in the fact-check industry. If it gets big it will probably be a trustworthy independent organization(s).
2. **Voters** using PTR to help make voting decisions.
3. The **media**, who uses PTR as news data and news stories.
4. **Politicians**, who will change their behavior so as to maximize their ratings.

At first only PTR producers will be directly using our tool, so that's our "prime customer." Later in the online Candle phase our customers will expand to include the other direct users.

Process Step 4. Identify underserved customer needs

We are still guessing here since we are not yet talking to customers. Instead we are reading about them via books, articles, and fact-check organization websites. Here are **our guesses** on what underserved customer needs are:

Need 1. Fact-checks are having low impact. All that work needs high impact somehow.

→(Need to list proof. This must be very strong.)

We theorize the reason fact-checks are having low impact is they do little to raise political truth literacy. Fact-checks apply to isolated instances of candidate behavior and compete with so much other news for voter attention. In other words, fact-checks do not push on the HLP well. Fact-check are a very poor measure of the overall truth of a politician.

By contrast, PTR strongly pushes on the HLP because it's a good measure of the truth (the quality) coming from a politician. Because it's a good measure it will be much more likely to be widely publicized and used by voters, leading to much higher impact.

Need 2. Poor tools to produce fact-checks since little reuse, loose process, large process variation between organizations, no formal argument analysis, no standard process to continuously improve.

It's hard to really know if this is an underserved need until we start talking to fact-checkers. Until then we can read about them in *Deciding What's True: The Rise of Political Fact-Checking in American Journalism*, by Lucas Graves, 2016, plus other sources like websites and articles. If it turns out this is a need then we can tailor our product to first serve this need, and to second serve the need for PTR.

I suspect it is a need. However, since we know so little about this need it's best to build the PTR MVP first. That's what the rest of this process does.

Process Step 5. Define your value proposition

According to Dan Olsen in *The Lean Product Playbook*, page 68, a **product value proposition** "identifies the specific customer needs your product will address and articulates how it is better and difference from the alternatives."

PTR addresses need 1. Fact-checks (FC) are having low impact. Journalists can see that lies allow way too many politicians to win. FC are supposed to significantly reduce this but they are not. This is tremendously frustrating.

How is PTR better than the alternatives? *We plan to conduct experiments proving that voters make "better" decisions using PTR instead of FC.* The open-ended questions in the experiments should explain how voters think, which will explain

exactly why PTR is better than FC or no FC. We hypothesize the reason PTR is better is it's *a much more efficient and accurate measure of what voters need to know to make better decisions*, compared to FC or no FC. That's what ratings are designed to be. That's why ratings are so popular in other industries.

Process Step 6. Specify your MVP feature set

For PTR we have these **use cases**. These can be used to build successively more complete MVPs. Early testers are Scott and Jack. Here are three MVPs, each containing more functionality. Their features are not listed but are implied. This writeup is input for William, who will translate this to what he sees as the best way to proceed.

1. Analyze an argument. Enter the text, mark up the text, structure the text into an argument, fill in missing portions of the argument, diagram the argument to define and analyze it, and calculate the truth confidence level. Early versions can be very simple: no back end, no hierarchy tree of rules and facts to select from, etc.

The challenge is making analysis easy. We're hoping that the second generation's elimination of rows and an intuitively created diagram linked to text elements will make thinking much easier, which will make the analysis task fairly easy. Making analysis easy is the crux of the entire product, so we expect a lot of iteration here.

2. Calculate a PTR. Calculating a PTR requires multiple arguments for one source. We can continue to use the Group/Text/Argument/Facts and Rules data hierarchy for this unless we discover something better.

3. Reuse prior work. Eventually we will have thousands of reusable facts and rules. We will also be reusing arguments as inputs to new arguments. This could be done with a new diagram node type: claim. At this point we need a full back end for all this data. Showing how easy it is to reuse all this valuable work is a huge customer benefit.

4. Online exploration and production. Ratings consumers need to be able to easily explore what's behind a rating. Ratings producers need to be able to easily produce ratings and do related work.

Product name

Due to the way groups can be any kind of source, such as politicians, organizations, and authors, the tool can be used to rate any kind of source, not just politicians. What we have here is really Source Truth Ratings. This implies we need to rename PTR to something else. Any suggestions? Candle is one. But perhaps the name should include "Truth Ratings" and have a good acronym.

The PPKB also needs renaming.

Note on generation two

Diagram node types: (Only facts and claims can be leaves on the diagram tree.)

Claim – A reusable argument produced by the tool. Circular use not allowed. This is a reused claim.

Fact – Some discrete piece of falsifiable knowledge with a known CL.

Rule – A rule of inference used to produce a premise or conclusion.

Premise – Same as intermediate conclusion except a premise maps to a phrase in the original text. This makes the text to diagram trail easier to follow and uses a much more familiar term: premise instead of intermediate conclusion. I suspect we should eliminate this node type, as it may cause confusion due to its arbitrary nature and William's second generation version will have links from text to diagram nodes.

Intermediate Conclusion – Optional, follows from a rule.

Main Conclusion – One per argument, the final conclusion of the argument. This is a new claim.

Thinking about it, what we've done in creating a new approach to argument mapping is, among other things:

- Add the Rule node type.
- Replace the traditional premise with Fact.
- Use Premise to indicate this appears in the original text.

Based on this, my inclination is to recommend eliminating the Premise node type. This leaves us with a clean, simple, elegant abstraction.

The four phases of the product vision in detail

The initial product vision is the output of process step 2: *Design candidate solution elements with inherently high ability to push on the HLP. (Politician Truth Ratings, Truth Test, etc)* Thereafter product evolution is (or at least should be) driven by continuous customer feedback. In this manner the original vision become the (somewhat) final product.

The **first version** was just Politician Truth Ratings created with a tool something like the PPKB, with an online version where people could drill down for further information, create new argument analyses, and use the information for whatever they needed. The **second version** was the addition of Scott's Candle vision, which enlarged the online site to include pursuit of truth in any sphere, not just Politician Truth Ratings. Now, due to pausing to do a little management planning, we have a **third vision**, the four phases described in this document. Here they are with more detail than that provided in the Introduction:

Phase 1. Fact-checking tool

This is extremely vague due to little study of how fact-checkers actually work and zero engagement with the FC industry. I'm guessing they use text processors and a database user interface to add fact-check (FC) articles to their database. PolitiFact's database has over 5,000 FCs now. The goal is to produce interesting articles that describe the FC.

There is no argument analysis at all and no database that shares what we call facts. So there's no specialized tool for creating FCs at all.

I've not yet read all of the book on FCs, so I don't have a deep feel for how fact-checkers work. *At this point I'd guess that a simplified form of the PPKB, with just the claim and a few premises, multi-user online, would do fine as a notable improvement.* Something like that would be a good first version to show people in the FC industry.

Thus we may need the interesting design feature of being able to flip a switch and use the second generation of the PPKB for FC work or for PTR work. This implies that what we really need is settings for levels of argument analysis completeness/rigor. That makes plenty of sense since it increases tool flexibility (different uses) and can speed learning the tool by starting out simple.

I don't think we should try to integrate the text processor's role for writing articles until we see what fact-checkers are doing. It's possible that a simple text editor would work.

That's all we can say right now.

Phase 2. PPKB

We have a highly detailed vision here due to the first generation proof-of-concept prototype. This is fully described elsewhere in the PPKB documentation.

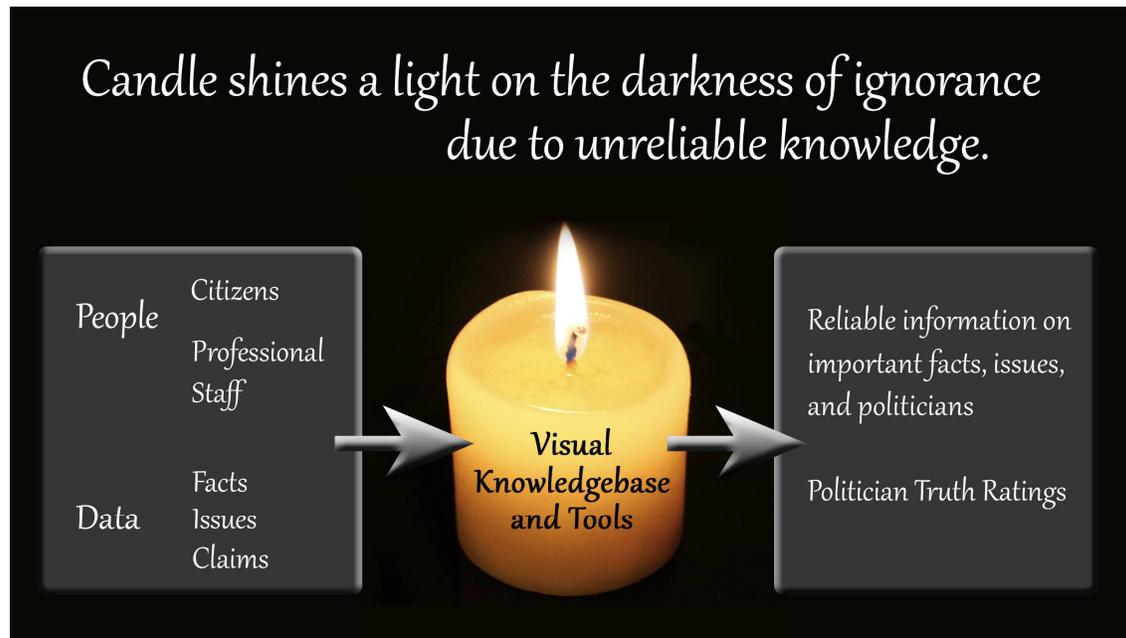
To summarize, the PPKB allows texts containing claims to be rapidly analyzed and turned into structured arguments. The top features are automatically calculated truth confidence levels for all argument nodes, weights for all nodes except the claim node, an automatically produced argument diagram, and automatic calculation of the Truth Rating. This is the average of a group of claims that were randomly selected.

Phase 3. Candle

This is a really exciting vision and is due to Scott's work. Even though the PPKB would probably naturally evolve into most of the Candle vision, Scott's vision can accelerate that, improve it, and has pinpointed the need to get to the Candle phase ASAP, since it's such an enticing vision to people and holds so much promise on where it could evolve.

The **first concise version of the Candle vision** is the one in the survey:

Politician Truth Ratings would be backed up by an online environment called Candle. The whole idea is that:



Candle will be an online visual knowledgebase of the information citizens need to make reliable political and issue decisions. It would include the facts and claims used to calculate Politician Truth Ratings, as well as information on important facts and issues. All information would be rated for its level of truthfulness in an unbiased manner. The data in Candle would be created by both citizens and a professional staff in a manner similar to Wikipedia.

Once Candle is built, an entirely new form of personal decision making becomes possible. Instead of relying on the news, candidates, and ads, citizens can come to Candle to explore the facts, arguments, issues, and politicians themselves—in a reliable manner, free from spin, deception, and partisanship.

“Whenever the people are well-informed, they can be trusted
with their own government.” ~ Thomas Jefferson

To this we must add more detail and Scott’s notes in his *Candle: Project Description* document. But I’ll try not to be wordy here. At this point we need concise visions that guide rather than specify. Only lots of customer feedback (customer validation) will allow product specifications.

The Problem – Currently citizens have no reliable, unbiased information about who to vote for and what positions to support on major issues. Candle solves that problem by providing that information. From the viewpoint of our analysis, Candle pushes on the high leverage point of raise political truth literacy by providing information with high truth quality. It doesn’t raise truth literacy *directly*, via education of how to detect political deception. Instead, it pushes on the HLP *indirectly* by providing a place where

citizens can explore, critique, and even create the content of the site. Some education will occur here, we don't know how much. A lot will occur in Phase 4 when solution elements like the Truth Test are introduced.

The High-Level Solution – An online environment designed to take away the confusion of what is fact or fake, and expose political deception. We call this environment “Candle.” Our mission statement:

Candle shines a light on the darkness of ignorance due to unreliable knowledge.

Candle will solve the problem by enticing people to do two very important things:

1. Easily explore political claims and see how well they rate factually and logically.
2. View truth ratings of policy makers and influencers: candidates, elected representatives, and other prominent people and organizations that impact policy.

Authoritative and comprehensive, it will be the definitive place for anyone—lay people, researchers and other experts, political participants, and everyone else—to explore or contribute however they are interested and qualified, in a structured format that entices them to formulate and adopt better solutions.

Note how this goes beyond just rating politicians. Any source can be rated.

What the Solution Will Look Like – Candle will contain all analyzed claims (arguments), their individual ratings, and the ratings for their sources. Since a complex claim can be the result of many arguments, a claim that a certain position is the best one possible can have its probable truth calculated in a scientific, reliable manner. The most important claims politicians make, either as candidates or in office, are what they will do or what they support. Each such statement is a *policy claim*, also called a solution or a position.

Once policy claims have truth ratings and are driving elections and debate, democratic decision making will enter a virtuous cycle, a race to the top, as politicians engage in cooperative competition to see who can prove the best truths, the best policy claims, about what's best for the common good of all. *That's what people will see.* Politicians will be competing on the basis the truth, instead of what prevails now, competing to see who can tell the most persuasive lies.

In terms of the tool itself, the user interface will allow citizens to very easily explore all the data. They will see an online visual knowledgebase of interconnected claims and their components. This includes statements of fact, the evidence and research behind argument analysis, proposed solutions, the outcome of past solutions, and so on. There will be tremendous evolution in how this works, since it's never been done before. *The core of the vision is to empower citizens to both use (which is super easy) and control (as they take training and work their way up in certification) the entire database, in a manner free from bias and corruption.*

How People Will Use Candle – This will emerge. It's not yet clear how users will accomplish what's described above. The use cases will emerge.

What Will Entice People to Use Candle? – The same thing that holds for all great products: it fulfills important needs better than any alternative. The present alternative is ferreting all this information out yourself and calculating your own truth ratings. That’s so laborious no one does it. Thus Candle’s attraction is it:

- 1. Provides basic truth ratings** on politicians, policy claims, and sources like new organizations and authors. There’s a huge demand for this information.
- 2. Let’s you explore these ratings** to see how they were calculated and what they depend on, so you can see for yourself if they were done reasonably correctly and in an unbiased manner. It’s an exhilarating immersive experience.
- 3. Makes the impossible look easy and correct.** Candle provides what was considered *impossible* before: accurate, unbiased ratings on the truth of politician’s important claims, as well as rating on policy claims and other sources. It makes use of that information *easy*, despite the vast size and complexity of the database. And it makes it *correct* due to the analytical rigor of our approach to argument analysis.
- 4. Is highly trustworthy.** This, we suspect, will be the greatest attraction of all. It may also be the hardest to accomplish. PTR has never been done before. We will have to experimentally prove that approximately the same ratings can be created by different teams, using the same tools and procedures, and that the ratings are a good measure of the “truth” of the claims. This is a high science challenge, so we should be prepared for lots of work here and critique. There will probably also be attempted sabotage to introduce bias.

To be trustworthy, Candle must be:

A. Impartial – The rules of logical reasoning, and the standards applied to evaluating the veracity of claims, are not based on any political or other kind of ideology.

B. Open – As long as they follow the methodology, people from all walks of life and political perspectives will be encouraged to contribute analyses and ratings, and many claims (if not all) will be evaluated by people with differing political affiliations. As noted earlier, training and certification will be required. Contributors will have different levels of certification, to protect quality of content.

C. Transparent – Participants will be able to see the reasoning behind any claim and why it earned the rating it did.

Phase 4. Additional solution elements to push on the HLP

This is so far away it’s pretty murky. The core strategy of the entire project is to push on the high leverage point of raise political truth literacy. Thwink has designed nine sample solution elements for doing this. One is Politician Truth Ratings. In this phase other solution elements will be introduced, such as the Truth Test and Politician Corruption Ratings.