

INFORMATION TRUST EXCHANGE PROJECT						
Ranking ("5" most important) of elements essential for proof-of-concept testing						
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Elem	Below are tasks that must be accomplished to create and operate the ITE. Which of these should be part of one or more prototype tests of the ITE?	How essential is this requirement to be included in a minimum viable prototype test of the ITE?	Is this service already in operation in some other context for an Internet network? (Yes or No)	If yes, where?	If Yes, Does this current operation demonstrate an adequate proof of concept for the ITE now? (Yes or No)	Task Action by ITE task group
<u>CREATE BUSINESS STRUCTURE / GOVERNANCE</u>						
1	Identify appropriate corporate form and draft	2	no	concept draft online	Review creation of BlueTooth SIG, Underwriters Labs, Cable Labs.	Bill Densmore can be tasked to work on this when the time is ripe
2	Develop a taxonomy of user attributes and proposed terms for sharing them across The Exchange	5	yes	mostly not public (see right); The ITE is at its core a distributed user management system. We have to take out what we mean by user data and when and how it is used and how the ITE will govern that. So, aside from making code that runs, this is Job #1.	Part of the problem ITE seeks to solve is to bring user identity management out of the proprietary shadows. We can find sources of draft user identity attributes in many places.	RJI is working on engaging a particular consultant to survey best practices and propose a standard taxonomy for the ITE
3	Assemble content taxonomy for sharing of content	2	maybe	AP, NYT, multiple content taxonomies exist	We need to settle on something.	Bill Densmore can assist RJI to determine how to survey best practice and adopt something.
4	Draft protocols and standards that are proposed to govern the operation of The Exchange and circulate for comment.	1	no	Hard to build the proof-of-concept demo without saying what it is designed to be in service to. So have to get a move on on this.	Doesn't need to come before the demo but should come with it or right after it.	Lower priority right now but Bill will be tinkering. Might await formation of Information Trust Exchange Governing Association
<u>FIND/CREATE TOOLS</u>						
publishers to offer exclusive content or						
5	ADVERTISERS -- Enable an advertiser to precisely reach unique but anonymous consumers with a trustworthy, relevant message, and reward the user's publisher, service provider – or even the user directly – for the privilege of delivering the message. --- <u>THERE IS NO CONSENSUS ON THIS</u>	2	yes	Third-party programmatic ad networks are doing this, but with no regard for the privacy of users or the needs of publishers / Discussing with experts at Mozilla and IAB Labs. Maybe talk to Centro or Lotame as proxies for ad-tech.	Get Mozilla and IAB Labs working on this / having the user taxonomy in draft form is important to this because it will control how ads get connected to the right viewers.	Work with Mozilla to integrate tracking After sanctioning ad exchange, below, this is an integration effort with a payment platform (such as Clickshare/Piano). Or ask Mozilla to build one.
6	ADVERTISERS -- Sanction online advertising exchanges to work in milliseconds with demand-side and sell-side platforms to match willing advertisers with willing publishers and aggregators to deliver "impressions" to interested consumers. Prices range dramatically, as do the content and form of the advertisements.	3	yes	Third-party programmatic ad networks are doing this, but with no regard for the privacy of users or the needs of publishers	Get Mozilla working on this in collaboration with one or two trusted publishers (such as Mike Smith/Hearst)	Identify and annoit (or create) a privacy-by-design TP ad network that will do this for ITE ecosystem.
7	ADVERTISERS --Enable the delivery of precisely-targeted advertising and other commercial content relevant to a reader's expressly shared demographic profile, social networking connections, ad content preferences and browsing history.	1	no	Third-party programmatic ad networks are doing this, but with no regard for the privacy of users or the needs of publishers	This is the Holy Grail to shoot for but nobody is doing it today based on an "expressly shared demographic profile." It is all done without user permission.	No effort at this stage. Premature.

8	CONTENT ACCESS -- Give publishers assurance that the person is authorized to view the resource requested and that, if money is involved, the money is going to be handled and publishers will get or give what the person expects.	5	yes	Piano (old Press+) offers this for individual sites but not really across multiple sites. Clickshare built and tested such technology but has not deployed it yet beyond individual sites. TownNews does it for single sites, might be able to connect all their sites. Other CMS vendors may have something	No	A user authentication and identity management service has to be at the base of proof-of-concept demo / trial work -- pick one -- Piano, Clickshare, TownNews, someone else -- or build one
9	CONTENT PACKAGING -- Facilitate custom assembly by the end user of information services from a variety of topical and geographic-oriented sources into personalized subscription packages.	5	no	This is the most fundamental value proposition for the ITE. Aggregators galore exist but none in a framework makes possible the tracking and monetization of clicks. Possible exception may be Dutch startup Blendle, which says it is poised to enter US publishing market	Confirming that the public understands the value of this and will use it is critical.	Contract with either Graf Mouen/Taxonometrics or Tracy Clark Reportory to delivery this (ideally get them to come up with a merged trial).
10	CONTENT REPOSITORY -- Provide an internal or outsourced service for storing and indexing news content uploaded by members	4	yes	Public Media Platform and AP Exchange	No, as they are silos and neither has real traction. We want to partner with both of them and allow them to serve the same users.	Contract with Public Media Platform to supply this feature as part of a proof-of-concept demo. Can be just wireframed at this point. LifeStream pulls from AP Exchange but only for AP member papers. Bring Michael Oreskes
11	DYNAMIC SERVICING -- Give publishers who offer their content real-time personal, demographic, preference or interest attributes of a user/reader at the time the user makes an online/mobile request for information, so the publisher can respond with targeted, customized messages or services.	3	no	This happens with programmatic, but the publisher doesn't get the information -- the ad networks do -- and it is fragmented and nonstandard among networks.	Showing this early on would be eye-opening for publishers but it's not necessary for proof-of-concept, which needs to first wow consumers.	This should be wireframed/discussed in the proof-of-concept demo; the architecture must support it; but it doesn't have to be operational; and it is going to involve developing legal permissioning terms.
12	FREEMIUM vs. FREE -- Allow the public user to chose among a range of options from (1) no advertising and no disclosure or use of their tracked activity in a subscription-based approach to (2) receipt of highly customized commercial messages and the wide, background marketing of their information preferences in a rewards-based program approach	5	maybe	A POC demo should suggest integration with a range of tracking-protection (on up to outright ethical ad-blocking) tools because this will set up the idea of providing a range of fully-ad-supported to fully-direct-paid content services.	Mozilla is deeply knowledgeable and interested in this. Dave Restrepo of Piano (fka Tiny Pass) has said they are doing something like this. Need to dig a little deeper into it. Clickshare's architecture will support this readily but it is not built.	This is largely inseparable from considerations about privacy and user trust. As a result, addressing it in a POC demo is essential. The ad-blocking quagmire has brought this to the fore.
13	LOGGING ACTIVITY -- Every click across the Exchange that involves an exchange of value (a payment for an article or a reward for viewing or doing something) is logged to an authentication and logging service, which is seen by the system participants as a "central shared service" although in Exchange practice it may be distributed	5	no	You might say that this is in place in the advertising world -- AdSense/AdWords and the networks; but not for content; showing this is absolutely critical to proving the idea of value sharing and exchange beyond the legacy advertising world.	This is at work in principle in the music- and video-streaming businesses (Apple, Netflix, Amazon, Pandora, Spotify) because of royalty requirements. Also available within closed networks (such as NewsBank) but not available across the open Web using a standard protocol.	Clickshare could do this. Probably Piano and several others, too). Might be useful to have Mozilla project manage as they have no investor stake.
14	LOGGING REPORTS -- At settlement time, the settlement service bundles all the clicks -- sorted by home-base of the users on the one hand and by the vending publisher on the other hand -- and determines an aggregate debit or credit to charge the home base and an aggregated credit or debit to charge the publishers (note that a "publisher" could be a brand which is paying for a user to view a commercial message). This all is done periodically -- daily, weekly, monthly -- probably weekly in prototype -- across the bank ACH Exchange with log reports sent to the home bases and publishers.	3	no	This could be "wire-framed" in the early stages of a proof-of-concept demo aimed at confirming consumer/user interest.	For publisher buy in this has to be real pretty quickly. Clickshare had it working in 1996 in prototype.	This is NOT a real-time activity which means there should be many vendor options, including outfits like IBM, First Data Corp. and bank-tech generally. Maybe PayPal.

15	MICROACCOUNTING -- Create a clearing-house settlement process for payments and credits among publishers and user-account managers.	2	no	Same as above	same as above	same as above
16	EXCHANGE SUBSCRIPTIONS – Enable publishers to be paid for providing digital content across an ITE Exchange without having to have one-off relationship with each reader/user.	2	no	same as above	same as above	same as above
17	ONE BILL/ACCOUNT – Create one account, one ID and one bill with which to acquire a wide variety of content from multiple, otherwise independent sources by subscription or by click/action.	4	no	Does not exist on the web for general application to published news content. Clickshare developed from 1994 and patented in 2008 a system for doing this (expires in 2023, I think). Piano can do it, too. Possibly others. See: http://newshare.com/disclosure for links to patents.	No. Need to show this in operation>	Discuss with Kelly Leach of Piano and Rick Lerner of Clickshare and Marc Wilson of TownNews. Hire one of them to deploy for the proof-of-concept demo. Randy or Roger (or Mozilla) needs to take charge of these discussions because Bill's conflict of interest is so clear and present.
18	PRICING -- Enable a content provider to establish and vary pricing for discrete information objects in real time based on the user's identity, relationships and use.	2	no	Only in the physical world with physical goods. Although in principle newspapers did this with syndicated content in the print era, but not in real time or variable by individual user. There have been news stories that claim to demonstrate that this is done by major physical-goods vendors online (Amazon and others). Prices can vary minute to minute and based on who's asking.	This will take some time to implement because it requires first establishing some unique business roles and then implementing them in code. Also it definitely require software on each content-vending website.	Just make sure architecture chosen for demos/trials will support this kind of real-time (legal) pricing discrimination.
19	PRICING -- Enable a service provider to make money by purchasing content at lower wholesale prices and reselling it at higher retailer prices to its users, managing the spread as a business exercise.	3	no	To me, this is the most fundamental, innovative and hardest to grasp piece of the ITE idea. Without it, a true marketplace can't emerge.	See above. This will require software on content-vending websites so can't happen easily day one.	Just make sure architecture chosen for demos/trials will support this kind of real-time (legal) pricing discrimination.
20	PRIVACY – Create mechanisms for aggregating and sharing anonymous demographic, interest and preference data about individual users upon transparent terms acceptable to the individual.	5	yes	See "Dynamic Servicing" above. This goes along with. Ad networks do this now, but neither transparently or upon terms acceptable to the individual. This is an aspect of an overall ITE ecosystem. There are presenters, providers, user identity managers, the authentication and logging services, financial settlement services. This is a demographic/profile management service which would work as an agent for one or more presenters/providers/identity managers. It is a "big data" function. It's	Manifestly NOT. That is an ITE differentiator and is core to the "Trust" brand. Mozilla might help build these applications and make it work really easily in Firefox, giving Mozilla a time-to-market lead and a boost for Firefox; ultimately it should work on any browser, however.	See if Mozilla would build this; alternately find a third-party network operator willing to change their business model to do this.
21	PRIVACY -- Allow ITE publishers / service providers who establish accounts and manage the persona and privacy of their users to be able and willing to share some demographic and interest information about their users to third-party publishers as a condition of those publishers being willing to provide services to those users.	4	no	Drummond Reed at Respect Network is hot on the trail of this; should collaborate with him.	No. Need to show this in operation>	See if Drummond will provide a proof-of-concept version of a "Identity Trust Provider" to the ITE ecosystem.

22	PRIVACY -- Create the opportunity for an entity or entities that would help consumers manage their personas across a variety of information services -- some paid and some that pay, or reward (e.g. rewards programs).	3	no	See "Dynamic Servicing" above. This goes along with.	This level of sharing among publishers (as opposed to among advertisers/marketers) does not exist.	See if Drummond will provide a proof-of-concept version of a "Identity Trust Provider" to the ITE ecosystem.
23	REMOTE USER SERVICE -- Enable publishers to sell information resources to anonymized incoming casual or "drive-by" users (a la "newsstand customers") at a reasonable price they establish, without knowing the identity or detailed information about these "guest" users.	4	no	Like wholesale-retail, this is a core value proposition of the ITE ecosystem -- the idea of purchase portability. This will be easier to implement quickly than wholesale-retail because it not such a big business-model rethink. The idea of serving a "non-local" user is kind of what Facebook Connect enables so this is not a conceptual leap but what's important is that you be able to SELL to a non-local user. That doesn't really exist anywhere now.	This should be implemented after the first Proof of Concept demo, if not with it.	Clickshare was designed specifically to do this; Piano can probably engineer it; so could TownNews, probably. See if Mozilla could project manage vendor selection or build.
24	SANCTIONS -- Create sanctions and sanctions process for violation of the rules/protocols of the ITE by its member/clients. Those applying the sanctions must have no competitive business interest in the process/outcome -- thus the need for a non-governmental and non investor-owned entity with a mission to efficiently oversee and operate a service and not profit from it. Profit is for the publishers and service providers who use the service.	2	no	Look at Visa and other association and network models for guidance. This should be an integral part of the governance set-up work. It's what gives the ITE value and teeth and the ability to project trust.		This is not critical path early, but should begin consultation with Todd Eskelsen, DC lawyer who has been involved in INfoValet since 2008. He wrote BlueTooth Association rules.
25	SEARCH -- Support a real-time query and reply to confirm desire of the end user to acquire the resource based upon its cost, value or other attributes including their preference information when making an information request.	3	maybe	Blendle may do this. Have to check This is an automatic aspect of setting up pricing/payments tracking, logging.	Maybe. Have to look at how Blendle does this, if they do, and what there experience has been.	Consult with Rick Lerner
26	SEARCH -- Enable multiple ways to create personalization of content preferences including a mixing and matching between inferred and expressed referencing.	4	no	LifeStream/Taxometrics has built this.	This is a core value proposition for getting the public to engage with the ITE, most features of which will benefit publishers.	Consult with Graf Mouen or Tracy Clark
27	SEARCH -- Create a means to deliver contextually-relevant content recommendations to Exchange members.	4	no	LifeStream/Taxonometrics has worked on this and could implement given time.		Consult with Graf Mouen
28	SEARCH -- Provide easy, low-cost, copyright-respecting access to "Deep Web" and other content stored behind pay, registration, membership and once-proprietary barriers.	2	no	This will require a LOT of integration with legacy silos so it can't happen quickly.		Consult with Google and Bing when we reach this stage.
29	SECURITY -- Information about end-user identities are known only to the end-user's service provider (USP). The Exchange system only knows users by a standardized unique alphanumeric identifier. Financial information and content access are protected by impenetrable security measures accompanied by extra strong encryption, thus protecting them from external disclosure as well as internal disclosure.	2	yes	This does not exist in the Internet environment but it does in the bank credit-card environment.	Yes, once people recognize the analogy. But the fast-track early POC-demonstrations don't have to show this. They do need to use an architecture that will allow end-user information to be known only to the end-user's service provider.	Talk to Bill Anderson and Drummond Reed about this when it rises to a priority.

30	SUBSCRIPTIONS -- Enable a plurality of subscription packages with pricing as in a free market for digital information -- set by the service provider who holds the end-user's account, and also set by the publisher who wants pricing control over their content.	2	yes	See No. 20 PRICING. One begets the other here. If you have built 20 you have Subscriptions functionality. But making it one number harder because of the need for publisher technology integration with legacy subscription services. Clickshare does this with multiple clients, however.	Yes, the Clickshare work (and probably Piano) demonstrates this is quite doable with respect to managing subscriptions; the notion of wholesale-retail notwithstanding.	Just make sure architecture chosen for demos/trials will support this kind of "user class" differentiation -- so when a user arrives at a content site with a request, the site can know if they are part of a particular subscription package, or a-la-carte, or not authorized at all.
31	UNIVERSAL TRACKING -- Enable a user's activity to be tracked across the ITE Exchange and that activity aggregated -- only -- to the user's home-base service provider for billing and analysis -- contingent upon explicit permission of the user. The logging service knows the user only by a unique alphanumeric identifier supplied by the user's "home base" at the start of that particular session. As a matter of policy, the logging service shall not sell or provide clickstream data to ANYONE and provides it only to the user's home service provider for their purposes (and for audit purposes to the publishing content provider if requested). The identifier -- to anyone other than the home base itself -- reveals nothing more than the identity of the user's home base.	2	no	Google and Facebook each appear to do this within their own ad networks -- keeping all the data. So it is universal tracking within Google and FB but is not distributed or a "four-party" model. Achieving this is just a matter of off-line processing of enhanced log reports once you have registration and logging of activity across the ITE ecosystem. But the key privacy- and consumer-respecting aspect is providing transparency and choice of multiple publisher/service providers, rather than, currently, just two (FB or Google).	This is largely a merger of several features described above.	"Tracking" is a loaded word and will need to be carefully contextualized. Privacy advocates like the Electronic Privacy Information Center should be consulted fairly early in our progress for their POV.