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A PROPOSAL:

RJI seeks collaborators for a new business model for news: A marketplace addressing personalization, privacy and payment

The challenge

Digital networks and technology platforms are now the dominant venues for advertising. Many users are "blocking" ads. Existing methods for the public to pay for information are generally uncoordinated ("siloed") or serve niches (such as music). As a result, revenues of publishing and broadcasting businesses, which supported -- and profited -- from newsgathering are shrinking. There is a general call for new business models for news. There's agreement that there is promise in approaches that offer a high degree of personalization -- matching content with user interests and preferences. As well, many experiments incorporate some form of payment from users to augment the limited potential of advertising. Any models that incorporate personalization or payments across services require ways of managing identity while maintaining privacy -- a difficult balancing act. Existing options are systems created either by (1) government entities or (2) large, private, profit-driven companies ("platforms"). **We propose here to foster (3) a "third way" to manage identity, privacy and payments.**

The 'third-way' proposal

The Donald W. Reynolds Journalism Institute (RJI) invites collaboration on a non-profit Information Trust Exchange (ITE) – a neutral clearinghouse for user accounts and content payments that respects user privacy while enabling content personalization. It will foster new forms of content, new types of user collaboration and new business models. To get there, we propose to lead specifications for the ITE and encourage entrepreneurial experiments and prototyping coordinated to operate with the ITE as it forms.

Publishers and technologists can help by:

- Reviewing and commenting on specifications for content and user sharing
- Suggesting existing and new consumer services that may drive ITE adoption.
- Selecting and offering content that can be part of trials.
- Introducing users to one or more trials
- Offering to conduct ITE-supported technical experiments or trials

To have the best chance at achieving operational scale, the ITE should tightly focus on fostering consensus on the minimum necessary protocols and associated business rules to establish an open and extremely low friction marketplace for digital information. This marketplace will respect and empower user privacy and enable a growing class of personalized services. It will aggregate and distribute content payments (or other exchanges of value). The ITE will be a public-benefit "third way" to establish and maintain these operating rules and protocols because it will be neither government regulation or the fiat of one or two for-profit companies. The ITE will create a neutral marketplace – a public bazaar -- for information exchange.

FOUR OBJECTIVES

RJI believes Information Trust Exchange collaboration should have four objectives:

- Foster network standards and collaboration among existing consumer-facing services, and enable new ones.
- Provide the public convenient access to trustworthy, valuable **personalized** content packages and services from a privacy-respecting account.
- Create a platform that will support at least two **business models** for publishers:
    - Wholesale-retail pricing and aggregated payments for digital content sharing.
    - Sharing of standard-format end user interest profiles for optimum personalization and user-permissioned marketing.
- Offer a balanced alternative (between government regulation and investor-owned "closed" platforms) for online identity and **privacy** management that:
    - Reduces by market forces the proliferation of opaque, proprietary, unaccountable cookie-based tracking
    - Enables a range of privacy/identity trust alternatives for the public

STRATEGIC MARKET ASSUMPTIONS

The ITE initiative adopts six key market assumptions:

- COLLABORATION -- While the number and independence of original news producers is an important element of a diverse press, the lack of collaboration on digital-media standards for sharing users and content value is impairing support for journalism. Collaboration on network sharing protocols and business rules is therefore essential to sustain competitive, independent journalism.

- SCALE -- Nearly all individual elements of the U.S. news industry are too small and lack present network capabilities sufficient to provide a compelling, personalized, broad-spectrum information service to their publics -- except through either: (1) Alignment with the goals and businesses of giant technology platforms or (2) Collaboration with other news and information organizations – legacy or pure-play digital.

- BEYOND ADVERTISING -- The decline of independent local retailing, the "nichification" and "digification" of verticals (autos, employment, food-entertainment, soon preprints) and the rise of tech platforms for contextual and social advertising have undermined advertising as a feasible core strategy for local news providers (print, radio and eventually TV).

- NETWORK SUBSCRIPTION -- Single-site subscription services have plateaued as a revenue source. They are a gateway to local news that lacks sufficient appeal to an increasing percentage of available audiences -- unless personalized, delivered to mobile devices and augmented with a variety of other types of information and services. Subscription bundles must reach across services and publications.

- CONTENT ATOMIZATION -- Publishers need a way to make money when they distribute their content outside their own "publication." This requires a common standard for tracking access at the story or "digital object" level ("atomized content") so that value can be attributed (whether credit for ad views or content reading) and exchanged.

- ENFORCEABILITY – Transparent exchange rules, rather than government regulation or private fiats, assure network trust, the public interest in privacy and identity management. "Bad actors" are sanctioned or removed. The ITE's role is trusted because it does not compete with participants. Hence, 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 and run services under exchange rules.

STRATEGIC OPERATING ASSUMPTIONS

RJI's responsive initiative adopts these five strategic assumptions about Exchange operating capabilities:

- Content originators must be able to set their selling price at wholesale in a free market for digital information, and subscription bundlers and aggregators must take business risk (and opportunity) at retail. A royalty-pool model similar to ASCAP or BMI in music is not sufficient for an exchange where object value varies widely as to purpose and characteristics. (Magazine vs. news, long vs. short, investigative vs. spot news, video vs. text)

- The exchange must support at least three forms of value exchange: (1) subscription bundles of content from multiple wholesale sources (2) Per-click purchase of individual

objects where buyer's credit is verified (3) Rewards to end users, directly or indirectly, for their attention to commercial messages.

- To facilitate marketer/advertiser participation, the exchange must support mechanisms for monetizing personal data, so that "freemium" is an included business-model type. However, the Exchange must also enforce transparency and choice and control for end users in managing their personal data, which will be clearly defined.

- There must not be a central repository of personally identifiable information. Records of exchange-facilitated activity will be aggregated and reported to content providers and service providers as permitted and required for business purposes, including value exchange, and not retained by the Exchange. As a design goal, the Exchange will not have access to unencrypted personal information about users. Users can choose among competitive service providers based on a level-playing field negotiation of their respective service offerings and privacy and data control policies.

- Similar to the bank / credit-card system, the network must be overseen by a non-governmental authority on behalf of the public and private -- and competing -- parties. The ITE will define rules for the competitive exchange of both content and users' identity information.

DESIGN REQUIREMENTS:

The design of the ITE network shall be subject to the following requirements:

PRICING

- CONSIDERATIONS: The value of news objects (stories, video, multimedia) vary widely based upon their timeliness, topic, type (long, short, investigative, narrative, spot, trade, MST) and application. News objects increasingly are disengaged from publisher packages by aggregation and "atomization." Royalty-pool models have largely failed because they remove the original publisher from value assignment.

- REQUIREMENTS: The ITE design must enable content objects to be sold on a bundled, subscription or a la carte basis. It must enable publishers to set wholesale pricing and retailers to set retail pricing.

USER DATA SHARING AND FREEMIUM PRICING

- CONSIDERATIONS: In today's Web environment, "free" services have become the *defacto* standard because users are paying for these services with their data. In this sense personal data has become a very real "currency" whose worth represents a significant portion of the $60B digital advertising market. However the current market for "adtech" and "trading" in this information has enormous issues with regard to privacy, transparency, and lack of user permission, participation, or control.

- REQUIREMENTS: The ITE design must provide an opt-in mechanism for users to be able to share selected aspects of their user profile and/or usage statistics with either: a) ITE publishers directly, or b) ITE usage aggregators. This mechanism must also provide an explicit means of value exchange to reward users for sharing this information.

USER ANONYMITY

- CONSIDERATIONS: The same way the non-digital economy supports cash purchases in which a buyer does not reveal any information to a seller, the ITE should enable purchases by users who choose not to reveal identity or profile information to a publisher.

- REQUIREMENTS: The ITE design must provide a standard mechanism for anonymous yet accountable purchases of content objects by ITE users.

USER-CENTRIC IDENTITY

- CONSIDERATIONS: The burden of online login and account management is currently unmanageable for all but the most dedicated of users. The alternative—social login services such as those provided by Facebook, Google, Twitter, and others—has too many privacy and intermediation problems to be a sustainable solution for the ITE.

- REQUIREMENTS: The ITE design must enable users to employ unique identifiers that do not require centralized registry services. The ITE architecture must enable the user to authenticate the user's choice of unique identifier to ITE publisher sites. This authentication must be able to meet system-wide identity levels of assurance (LOA) that also meet the LOA requirements of a specific ITE publisher. The ITE identifier architecture must enable users to control the privacy of these identifiers in ITE interactions.

USER CHOICE OF ACCOUNT HOSTING

- CONSIDERATIONS: Users will not adopt an ITE network that locks them into a single account host provider any more than they would adopt a banking network that locks them into a single bank. Having a choice from a competitive marketplace of ITE account host providers is as important as having a choice today of from a competitive marketplace of email account providers.

- REQUIREMENTS: The ITE design must allow users to choose how their ITE account will be hosted. Choices must include self-hosting and service provider hosting.
  For service provider hosting, the ITE design must provide options for both self-asserted assessment of compliance with ITE policies and reputation-based assessment. A user must be able to move (port) their ITE account and account data from one account host to another.

USAGE BILLING AND SETTLEMENT

- CONSIDERATIONS: The overhead and friction of maintaining multiple payment options across multiple sites is currently prohibitive to all but the very largest publishers and payment service providers. Therefore it is paramount that the ITE offer a network-wide alternative that reduces the costs and friction of all ITE payment options to an absolute minimum.

- REQUIREMENTS: The ITE design must provide a standard mechanism for billing users for the content objects a user has consumed during an accounting period, and for settlement of a user account at the end of an accounting period. This billing and settlement mechanism must be as lightweight and low-friction as possible for both users and publishers..

PUBLISHER AND USER INDEPENDENCE

- CONSIDERATIONS: The same way that a merchant's decision to accept Visa or MasterCard does not preclude accepting other forms of payment, including the merchant's own in-house credit card, the ITE should not in any way prevent a publisher from continuing to use any other technology or service of the publisher's choice.

- REQUIREMENTS: The ITE design must not prohibit or prevent publishers or users from using their own information exchange or value exchange mechanisms outside the ITE.

OPERATING FEATURES

These six operating features of the ITE are suggested by the considerations and requirements above.

- NETWORK SUBSCRIPTIONS – The service should allow publishers to be paid for providing digital content across an ITE network without having to have one-off relationship with each reader/user.

- DYNAMIC SERVICING – Publishers offering their content may obtain – with user authorization -- personal, demographic, preference or interest attributes of a user/reader in real time as the user makes an online/mobile request for information, so they can respond with targeted, customized messages or services.

- MICROACCOUNTING -- Publishers are not required to participate in operations which "pool" royalties. Rather, a feature of the service should be census-type logging and aggregation of billable content requests, with clearing-house settlement of payments and credits among publishers and user-account managers.

- WHOLESALE-RETAIL PRICING – Publishers shall be able to use one or more methods to establish the price they wish to receive (and be assured of payment) for a discrete digital object (or bundle), and be able to vary that price dynamically in real time based upon the attributes of the user requesting the object.

- ONE BILL/ACCOUNT –The service enables a user/reader to have one bill/one account/single sign-on access to information from (virtually) anywhere, by subscription or by click/action.

- CONTENT PACKAGING – In order to gain the participation of end users, publisher and billing/identity-service providers of the system should be able to facilitate custom

assembly by the end user of information services from a variety of topical and geographic-oriented sources into personalized subscription packages.

OPERATING METHODS (proposed)

These five ideas for operating methods are for discussion purposes only and not necessarily indicative of ultimately preferred design or operation. Proposals for alternate approaches are encouraged:

- PROFILE DATA SHARING – ITE service providers who establish accounts and manage the personas and privacy of their users generally will – only with end-user permission -- be willing to share some demographic and interest information about their users to third-party publishers in exchange for those publishers being willing to provide network services to those users.

- EVENT LOGGING -- Every click across the network 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 network practice it may be distributed and hierarchical as with DNS.

- VALUE AGGREGATION/SETTLEMENT -- 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 credit for the user's billing agent (akin to a "retailer") and an aggregated credit for 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 network.

- DISTRIBUTED DATA CONTROL -- The user's billing/identity agent gets these bundled log reports and is free to sort them or use them as they wish (subject to their terms of service with the end user as to usage and privacy protection or not); in some cases there may be a discrete charge or payment to the end user for a particular access; in the vast majority of cases, one supposes, the billing/identity agent will use the click-stream reports for demographic, marketing and business-model analysis but the end user will merely be paying a monthly subscription for some class of service.

- AUDIT CAPABILITY -- The publisher (or information service provider), also gets bundled log reports of total usage so they can audit their payment or receipts, and the only sorting they are capable of doing is by the source of the end-user (i.e., their service-provider ID). Conceivably they might have methods to associate these "anonymized" usage reports to specific users. But the ITE would be in the business of making business rules governing this practice and the rules would be enforceable by anything up to the ultimate sanction -- cutting the offending information service provider off the system.

Implementation Steps

Goal -- Complete the design and testing of service prototypes and the creation and deployment of a sustainable ITE marketplace. Each of the phases of this implementation concludes with a go/no go decision on moving forward. Additional phase timetables will be committed upon the success of Phase One.

Phase One -- (Refine project description & test interest levels) [*July 2015 – Nov. 2015*]

- Revise the description of the ITE – its purposes, features and implementation plan based on feedback from this review
- Based on that revision, develop a step-by-step description of "how things will work." The elements include: |
    - Enrollment/registration processes that identify (and protect) users
    - Secure credentialing process with user-set privacy levels
    - Single sign-on capability across participating sites and services
    - User-managed and updatable profiles of preferences, interests and demographics
    - Certification of trusted providers and participants
    - Matching dynamically-specified buyer interests with customized seller offerings
    - Transparent payment capability with user-specified ways to pay
    - User-defined rewards that can be collected among user-specified provider participants
    - Visa-like payment engine/network/capability to slice-and-dice payments, establish and enforce rules, handle problems, service customers, provide reports, administer licenses/IP
- Identify existing technology systems, services and organizations that could be part of the ITE network collaborating with its development and/or providing its services under contract with it for those services.
- Identify potential funders for the creation and testing of the system
- Recruit a prototype-stage builder and for-profit operator of the ITE authentication and logging service.
- Determine which leading news companies (legacy and digital born) will participate in an extended test/prototype of this system/network.
- Research governance and corporate form for the ITE collaborative.
- If we get enough positive decisions from these steps, proceed [*November, 2016*]

Phase Two -- (Acquire development resources) [*From November, 2015*]

- Designate builder of prototype ITE network authentication, logging and billing services.
- Recruit in-kind development resources from other organizations and individuals
- Develop and submit one or more grant applications for financial support for the creation and testing of a prototype.
- If we get sufficient resources from these steps, proceed.

Phase Three -- (Experimentation & Prototype Design)

- Identify and encourage experimentation by third parties in several key areas, which may have standalone value and can also contribute to and operate within a larger Information Trust Exchange.
- Complete prototype ITE network authentication, logging and billing services.

Phase Four -- (Public operation of prototype services integrated with ITE.)

- Launch a yearlong live test of the prototype ITE network.
- If the results of the year-long test suggest this system can be sustainable, proceed to Phase Five

Phase Five -- (Confirm business plan, incorporate and launch the ITE)

The Information Trust Exchange, whether chartered as a non-profit association or a co-operative, would not compete with its members in news or advertising, because it is proposed not to be a direct operator of anything – rather, it will develop standards, protocols and business rules, and license operation of authentication and logging services – data exchanges – by one or more private, for-profit operators.

APPENDIX A

Concerning the Future of News: A brief discussion

Consumers need a simple, secure way to access, share and pay for valuable information from multiple services and sources. News organizations – legacy and new – would like to be the best-possible source for those users to receive a timely diet of information that matters. Now, people on the go want to efficiently access the broadest range of multimedia content customized to their needs – in a single, simple action. Achieving this simplicity will require the coordination of publishers, content licensors, aggregator and usage trackers, a range of stakeholders currently unfocused on such collective activity.

When it comes to the future of the news business and, maybe, journalism writ large, there are few folks who would argue that the interplay between and focus on three mega-issues, all sharing a common first letter and perhaps more than that — personalization, privacy and payment — will determine a great number of things with sustainability at the top of the list. If RJI could throw a switch or press a button and create an organization that could weave those issues together and serve as a clearinghouse for payments, a protector of privacy and technological whiz kid for personalization, life would be good.

But there's no switch to throw or button to push. The amount of coordination, collaboration and overall strategic thinking required is significant. But that doesn't make the problem go away or lessen the urgency. So, in the spirit of setting out on a long journey, RJI takes today a first step: Defining a solution and organizing a first step toward making it real. In the last decade, technology-based companies such as Google and Facebook have invented and grown the digital-advertising business, leaving traditional publishers far behind. And Apple has credit-card-based accounts of over 800 million iTunes users. Many experts have concluded the news industry cannot compete for the attention of the public without dramatic new approaches.

Three views:

- "If you're going to base your entire business on advertising, we all know how the story ends," Raju Narisetti, senior VP of strategy for News Corp., said in DigiDay podcast posted June 19. "Growth in digital audience does not equal growth in revenue. That was a classic mistake in digital we all made: thinking we could grow the audience significantly, and somewhere along the way we'll make more money digitally than we make in print. That has turned out to be completely not true. The supply of journalism on the Web is infinite."

- "I think the advertising business has been amazing as far as supporting journalism in the U.S. since World War II," David Gehring, a former Google executive now with The Guardian U.K., said earlier this year. "We need another economic model that will support journalism in the digital economy for another 100 years. As so it has to be a viable thing for both the platforms and the publisher."

- "There is a black hole in the internet universe that is sucking most of the revenue into it," John Paton, outgoing CEO of newspaper publisher Digital First Media, said of the largest search providers and social networks. "They have 70% of the mobile ad market. And that is only one of the challenges of the industry. The other is simple; the publishers know next to nothing about their customers. And what little they know, they are giving away for free."

> Paton added from a stage in Oslo, Norway in mid-June: "Our customer knowledge at this stage, is relatively zero. Legacy business knowledge has not given us the level of data we need to function. We have to rethink those arrangements, because we are just giving it away for easy money. Facebook is building a walled garden, and we are providing them with our data."

Thus, we may now be at an inflection point. Legacy news organizations realize they cannot continue to exist in shrinking silos with customer relationships controlled by others. They must adopt common technologies, business rules and standards for managing user identity, privacy, trust and information commerce if they want to have the collective authority and scale of the platform companies such as Google, Facebook, Apple and Amazon. The challenge for news and other publishers is not one of technology, but of coordination. In a report, "From Persona to Payment: A Status Report on the News Ecosystem, and a Challenge to Create the Next One," RJI fellow Bill Densmore reaches eight conclusions, including these two:

- *The news industry lacks a system for variable pricing and exchange of individual items of news content in real time. Yet in the last 10 years, the advertising industry has innovated sophisticated "programmatic" technologies that allow in milliseconds the variable pricing, bidding, selection, tracking and billing of advertisements to targeted, unique consumers.*

- *The news industry also lacks a common system for single-sign on or user authentication across multiple news websites. Yet in the last 10 years, Tier 1 U.S. universities running on the Internet 2 network have used open-source Shibboleth and SAML trust technology to achieve single login across 100 independent campuses and institutions.*

The original architecture of the Internet identified connected machines by something called an IP number. But it provided no method for exchanging the identity of individual users. User names and passwords provided an initial solution. Then Netscape Communications Corp. invented "cookies" – the idea that a tiny file on your computer could associate your computer with previous activity. Banks and new financial-service companies introduced ways for using credit cards to purchase online.

User names, cookies and credit-card numbers have enabled remarkable services and features. They have turned the Internet from an academic and military experiment into a vital information superhighway of commerce and convenience. But they have also created challenges to user privacy. And payment services don't yet economically work for aggregating small bits of information from many sources into a personalized service.

An important reason why legacy news organizations may have failed to embrace some protocols and platforms may be because those platforms were dominated or controlled by a for-profit, investor-owned entity. Either this engendered mistrust from the very start among parties who aren't sure whose interests were paramount (such as Microsoft Passport), or the equity owners reached irreconcilable differences (as with New Century Network and Newsright). That's not what the ITE would be, or do. The notion of non-equity ownership, shared governance and collaboration in getting the ITE going is core to the idea. It is designed in clear contrast to the emergence of a small number of proprietary Internet "platform" companies – Google, Facebook, Apple and others -- that are dominating advertising and commerce, and an alternative to failed U.S. news-industry collaborations, which have been – fatally – about making profits, rather than about creating a marketplace where all can profit.