

# Mine! as VRM Infrastructure

## document version 1.0

***Something old, not much new, something user-driven, all online***

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This paper sets out to describe a version of infrastructure or foundation for [VRM \(Vendor Relationship Management\)](#) based on an [alternative view on sharing information online](#) between individuals and of [online identity](#). It sets out to explain the strategy and tactics for design, development and adoption of tools - the Mine! and FeedMe (see glossary) - and creation of an infrastructure for other solutions - VRM (relationships with individuals and vendors, transactions), self-defined identity, authentication, data portability and hopefully many more. The aim is to equip individuals with tools to **take charge** of their data (content, relationships, transactions, knowledge), **arrange** (analyse, manipulate, combine, mash-up) them according to their needs and preferences and **share** them on their own terms whilst connected and networked **on the web**.

With regard to technical aspects, the goals of this paper are, [again](#), to:

1. invent as little as possible
2. reuse only popular technologies, techniques and user-interface metaphors in order to enable VRM, and...
3. provide maximal inclusiveness and extensibility to the Mine! implementation, to permit the greatest potential for growth.

## Glossary

### **Mine! User (or just "user" or "individual")**

You, the person who possesses VRM software and seeks to use it to share information with third parties.

### **Mine! Document (or just "document")**

a data file of arbitrary format, which might usefully be shared or published via VRM; examples include but are not limited to: vCard, hCard, iCal, JPEG, PDF, MP3, HTML, XML; a VRM Document *should* have a IANA-registered content-type and subtype (eg: "text/csv") or have a widely recognised x-token (eg: "text/x-vcard"). See [IAN](#)

### **Mine! Object (or just "object")**

a VRM Document which has been superencoded (if necessary) to be fit for direct, literal inclusion within a VRM Feed's structure, possibly with the inclusion of tags or other metainformation describing the document.

### **FeedMe (or just "feed")**

a series of one or more Mine! Objects which have been encapsulated in a popular web syndication format, as described below. The feed's URL will also provide a simple API permitting retrieval of individual VRM Objects, encapsulated in a feed "wrapper" for orthogonality. Described in an earlier paper on [Feeds Based VRM](#). It is a subset of the Mine!, part of its functionality.

## **Mine! Friends (or just "friends")**

the set of vendors, associates, personal friends and other third parties who possess the necessary individual credentials to access (ie: "subscribe to") some or all of a VRM User's feeds.

## **Why infrastructure?**

Infrastructure typically [refers](#) to the assets that support an economy and, more generally, to a set of structural elements that provide the framework supporting other structures. The Mine! is a solution that, if implemented right, can support other solutions or approaches.

When it comes to my web presence, existence, identity, digital footprint, online DNA etc, there is currently nowhere I can pull it all together and take charge. When it comes to the online economy, apart from the information transactions, communications and e-commerce, my attention is traded as the eyeballs currency, my [data 'hijacked'](#) and used against me (marketing, ads, spam, privacy abuse etc), my transactions and purchase history locked into vendor silos with [keys thrown away](#) (failure of CRM).

On the social web, the number of third-party defined spaces designed to 'contain' bits of my data - [photos](#), [content](#), [relationships](#), [transactions](#) and purchase history, [movements](#), [knowledge](#), [privacy](#) grows by the week. They allow me to create stuff and share it with others online. Over time, my fractured existence across others' silos becomes more obvious. I lack the means to perform the three simple functions - capture, manipulate and share my data on the web before and above anyone else. In my opinion, being able to do this over time and persistently amounts to establishing and driving [my own identity](#).

There are [calls](#) for greater convenience of replicating and transporting data on the web, across the various platforms that give us bits of functionality. Data portability's first question was 'Why can't I take my social graph with me from MySpace to Facebook to Bepo to Twitter to Flickr to Dopplr or any other application or platform that allows me to add contacts and friends around the functionality?' Why not indeed? My question is 'If I could do that, why import it again and again yet to another platform that will live off my data in exchange for some functionality or service within their silo?' Why not keep it in a place that is mine, my own platform.

The Mine! was conceived as a structural element that helps individuals bring together the data they would like to a) have in their 'domain' b) manipulate and learn from and c) share with others as you see fit. A haven for data, a playground and a spring board for further online existence. The foundation for individual being the platform and for creating an 'asset' to be used in further interactions, relationships and transactions.

## **Where does VRM come into this?**

### ***The locked see-saw***

On the web I decide what I blog, bookmark, I read and who I add to my network. I have the autonomy to do things that 10 years ago only institutions could - publish, distribute, build audiences, contribute knowledge, define concepts, ideas and get visibility, create a 'personal brand', sell and buy. [VRM](#) can tap into the autonomy and drive of people to create, share, distribute, and more.

Vendors need to adjust their behaviour and the flow and exchange of data between vendors and customers needs more level and balanced. Where appropriate, that exchange should

approximate a relationship between humans, rather than systems. The defining characteristic of such relationships is that both parties are comfortable with it, and mutually benefit from it.

For vendors VRM can find ways to outsource some of the relationship back to customers. Companies own whatever passes for a relationship with their customers and by law are responsible for the entirety of that relationship ([CRM](#), customer databases, privacy policies). Think of the junk mail, the waiting on hold, repeating of the same information to tech support or customer service staff every time you call, of the endless adverts and marketing campaigns blasting you with 'messages'. These are not conversations and relationships, they are a crude foreplay to naked transactions.

Companies have no incentive to change anything other than step up the 'stalking' of your behaviour whenever they can. They already collect data on the web about you, and analyse, mine, capture, and sell them. If they use them for your 'benefit' (as defined by the companies), the data is part of market research or direct mail.

VRM is not them versus us; it creates a situation where vendors face a real choice between behaving cooperatively with the customer, or losing them and a situation where customers also face a real choice, not merely a choice between silos.



**Figure 1**

Customers and vendors are a locked see-saw with one hugely outweighing the former. Like with a real world see-saw, the fun is spoiled for both. Giving individuals tools to redress the balance, the pressure from customers should level the players. Independence from vendors, platforms or anyone who would like to benefit from your data without permission will be key.

So VRM should start with equipping the individual with tools based on existing technology and applying an understanding of how people use such tools online. Flexible and modular, the tools need to help them to reclaim their data, piece together fractured identities. And then allow them to drive it forward with all of the benefits that it can bring them and to those they interact and transact with.

## Why the Mine!?

The scenarios for changes in vendor behaviour are common sense. They are about getting companies to treat you the way you deserve - e.g. as a loyal customer, with your preferences respected and met. Instead of companies 'relating' to you through branding and messaging, they could communicate and transact with you based on your real preferences, not market research demographics and averages. Variable pricing, better conditions, and better choice are much more preferable to pop ups, sweepstakes and 40% of mystery case. Doc Searls' [example of his cable/satellite company](#), when they lost his track record after years of building loyal customer kudos with them, doesn't need new technology to prevent it from happening.

And yet, it happens. So let's start from the other place - the customer.

The fundamental point about the Mine! is that users own their data [1]. A shift in the balance of power happens because user data is something vendors want and harvest. By giving people means of keeping others away from it as well as share it on their own terms, they end up taking vendors toys away. Two things can then happen: People can gain better understanding of their preferences, and people can choose who gets to see them.

Large parts of the web have been developed with the assumption that the individual user has to have things done on their behalf. Hard core geeks and technically savvy people have always been closer to the read/write web than most of us. Until the advent of blogging, users was seen as helpless, as eyeballs to be herded, their attention pillaged - think of Web 1.0 banner ads and mercenary use of flash.

Blogging has been the visible phenomenon to have changed the media and '[content](#)' landscape. Individuals have been gaining control over their writing, not always driven by the need for an audience. The early bloggers started blogging not to 'broadcast' or build a following but because it '[beat shouting at TV](#)'. Now anyone can publish and manage their own writing and use the web as 'distribution' network.

It is worth noting that bloggers did not set out to change the media or teach journalists a lesson and yet, the media is looking to adjust to keep up and evolve in line with changes to content creation, distribution and social impact as driven by bloggers. Similarly, for VRM, the pressure on vendors should be coming from customers ready to reclaim their data and preferences and take charge of the relationships with vendors. With the right tools, users are already savvy enough to take that up.

Mine! and FeedMe are designed to be **of** the web (not just **on** it), and need to be part of what people are already doing. People are already blogging, uploading and sharing photos, bookmarking, spending time on Facebook, MySpace, using various applications to do fun and useful stuff. The Mine! will provide an alternative that puts them in charge of their data, and avoids platform lock-in. It will have flipped the web data model and turn the user into the authoritative source of his data, preferences and information.

## Plugins as separation of functionality and data

This is a simple idea of putting a Chinese wall between those who provide functionality and those who store data. For example, in order to do anything with my photos, I need to upload them to Flickr, in order to enjoy Wesabe's benefits, I need to upload my bank statements to their platform. Web 2.0 services such as Flickr, Dopplr, Wesabe, del.icio.us, Twitter etc provide two things by default - a place to store your data and the ability to do something to or with them.

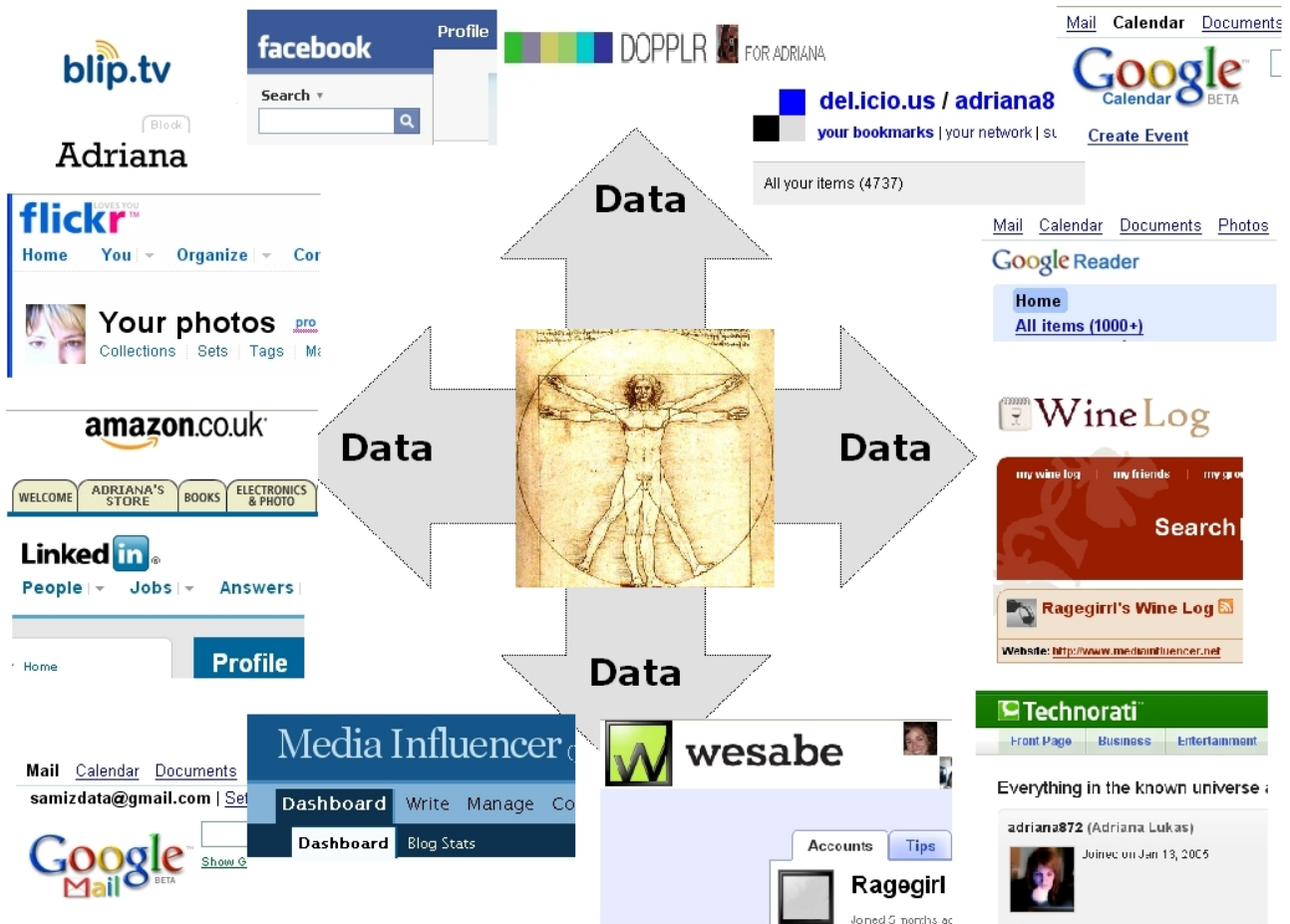


Figure 2

The Mine! is predicated on separation of the two - data and functionality. I have the data and I want to apply functionality to it - the default is that I give up that data to the various platforms that provide me with web services. For users, the idea that you separate the storage of the data from applying functionality to it is a novel concept, as they have been used to giving up their data in exchange for whatever functionality a particular application or platform offers. For example, here is my 'fragmented record about wine stored across Flickr, Picasa, del.icio.us and WordPress. I want it all in one place, referenceable and shareable.

**Flickr**

[My flickr photos wine search](#)

**Picasa**

[My Picasa wine web album](#)

**Del.icio.us**

[My del.icio.us wine tag](#)

**Wordpress**

[Thresher meme hits again](#)

[L'Esprit Lafite or Lafite iz well fit](#)

[Fine wines of burgundy](#)

[Tonight's festivities and booze](#)

[Screw or unscrew](#)

[Wine marketing a la Bratislava](#)

[Time to choose](#)

[Fermenting juicy goodness](#)

[Stormhoek red](#)

[Australian port](#)

[Australian-best](#)

[Friday night](#)

[Don Julio](#)

[Dinner in Chelsea](#)

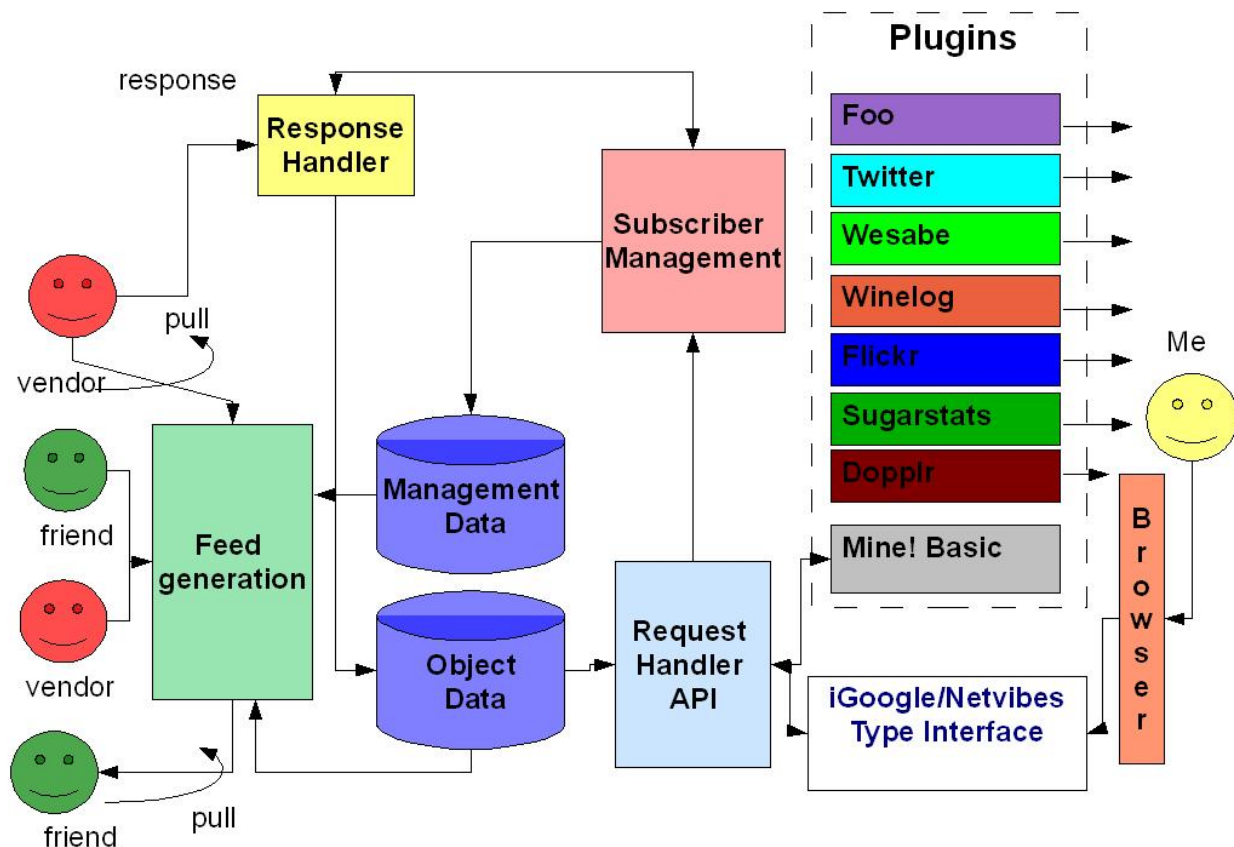
[In vino veritas](#)

Once I have the option of putting the data under my 'domain' i.e. in the Mine!, I can create new data or import existing data. I can then manipulate it; mash it up, trend it, analyse it, collage it. The plugins will allow me to apply functionality to the data in the Mine!. A plugin for the Mine! is a package of functionality that enables users to manage a particular topic or format of data. I can create zones in the Mine! to do with my areas of interest - travel, restaurants, shopping, cars, wine, fashion, cosmetics, sport, etc.

Plugins can be designed by anyone - users or companies. They can be free, commercial or open source. A plugin won't survive unless it is helping me do something I want. I envisage many applications being invented as plugins - by people or companies addressing a particular need or functionality. There is an incentive for companies to create applications for the Mine! as a way of extending their expertise. For example, Virgin Atlantic may design an application to manage travel data, a cosmetics company a plugin to manage my notes, purchases and tips. In exchange I may decided to share the data managed by that application with them. (I will not be locked into the application as I am free to replace with another competing one).

The Mine! does not need to be organized around the plugins. It can just as easily be organised around topics or 'zones', with vertical and horizontal plugins managing object data. The actual data is open - you have access to it directly or via plugins.

Mine! and FeedMe are part of the disintermediated web, the plugins designed to bypass platforms in favour of the web as the *platform*. The plugins give power to the user - just like I can switch to a new feed reader with my OPML file, I will be able to switch to a new plugin. Where I now have to generate OPML in order to import my feeds subscriptions to a new reader, I can simply apply new plugin to my data inside the Mine!.



The Mine! April 2008 as seen by Adriana Lukas & Alec Muffett

Figure 3

1. Go to browser, log on, get to welcome page - **Netvibes or iGoogle type interface**
2. Interface to access your data or plugins available, e.g. an index page.
3. First time you log on the page will be empty - no data, no plugins, no feeds - login to basic HTML with generic things like My personal data, picture, address etc - **Mine! Basic** with core functions (the first 'plugin')
4. Import facility to **Object Data** (a plugin function or a core function)
5. Create object on **Object Data** (a plugin function or core function)
6. Functionality applications/plugins (PHP type pages, or Perl scrip, CGI, Java) - **Plugins**
7. Generate a feed with unique link and share it with a friend or vendor - **Feed Generation module**
8. Manage the feeds by topic or recipients, adding or removing friends/vendors, adding or removing fees by subject, topic, type of data - **Subscription management module**, with feed data stored on **Management Data**
9. Receive response from vendors in your feeds (preferences, RFPs embedded in them) - **Response handler** (more details in **Transactions** section)

There are two immediate benefits to the Mine!:

- Analytical - I get value out of my increasingly data-intensive existence, learn about my preferences in ways that can inform my future purchases, build on existing information, past decisions and behaviours. Instead of being someone's demographic, I can define myself as 'the demographic of one'. Judging from the explosion of blogging & social networking people are making wide use of the ability to publish and share.

- Communication - I have a place from which I can share data and information with the rest of the world, on my own terms. The Mine! adds value to the user even without the feeds though its ultimate usefulness would be limited if it were to exist in splendid isolation. Some sections might do as I may never share particular data with anybody but ultimately the Mine! is a web-based tool helping me to redefine the relationship with vendors and others. It starts from individual users who already know how to communicate and relate. It is the vendors that are not taking part.

Platforms will no longer be the only places I can manage my data on the web. Vendors will no longer need to provide services to me on their sites. The relationship will be about something else, not my data. Think Amazon, Virgin Atlantic, travel sites, wine merchants, fashion, cosmetics retail sites, utilities sites. With the Mine! I can share data about me with them - through the feed that I generate at my convenience and privacy level - their understanding of my preferences richer than ever, providing they do not abuse the relationship. Scaling it across many customers, it offers unparalleled insights into market trends, adjustments to supply chains, and ultimately business models.

## **Feed me FeedMe**

FeedMe is feeds generated with the Mine! in the Feed Generation module - subsets of data originating from the Mine! owner and received by subscribers (vendors, friends, web pages which need some nugget of information about me, JPGs for photo printers, manifests for insurance company quotation robots) so that they can get value from me, and provide value back to me. This is using the technology of today to engage with businesses as an equal partner by using feeds to share structured objects rather than mere superencoded HTML.

Feeds are designed for distribution of objects and data that I create and want to share. It is a way of sharing the riches in my Mine! with friends and contacts. You want to know good hotels in New York? Here is a feed to my well organised and detailed notes about hotels in New York. The information itself wasn't created for you but for my own reasons. I have a very good incentive to create a useful record and recommendations as I travel to NYC a lot. With FeedMe I am letting you benefit from that too.

The FeedMe is designed so the feeds can flow from the Mine! *and* maintain my autonomy as far as possible. Hence the condition that I can regenerate, i.e. cut off the feed at will. The FeedMe is to the Mine! as RSS/Atom is to a blog. The crucial difference is that I have a say in not only what gets published but also who gets to see it, at least with regard to the first order audience.

FeedMe is based on the same functionality that Google Calendar Private Address currently provides.



- [Calendar home](#)
- [Overview](#)
- [What's new](#)
- [Take the tour](#)
- [Event publisher guide](#)
- [Privacy information](#)
- [For Work or School](#)
- Help Center**

### What's a "Private Address" (XML/ iCal/ HTML feed)?

Your calendar's "Private Address" in XML or iCAL format lets you easily view a read-only version of your calendar from other applications -- like a feed reader (e.g. Google Reader) or a product that supports the iCal format (e.g. iCal for Mac). Your calendar's "Private Address" in HTML format lets you view a read-only version of your calendar without signing in to Google Calendar.

To obtain your calendar's "Private Address," just follow these steps:

1. In the calendar list on the left, click on the down-arrow next to the appropriate calendar and select "Calendar settings." (Alternatively, click on "Manage Calendars" at the bottom of the calendar list, then click on the name of the appropriate calendar.)
2. In the "Private Address" section, click on the "XML", "iCal", or "HTML" icon. A pop-up window with your calendar's private URL will appear.

Additionally, you can export your calendar information by clicking on the "iCAL" button and clicking on the displayed URL.

**Note:** the private address was designed for your use only, so be sure not to share this address with others. If you want to let others view your calendar without directly sharing it with them, provide them with your calendar's public address (or "Calendar Address"). If you accidentally share your calendar's private address, click on the "Reset Private URLs" link to regenerate your calendar's private address.

With Google Calendar once you reset private URL, it stops working for all those that have it. With FeedMe you are able to generate such URLs/feeds for as many (or few) people as you wish. And reset it without cutting off anybody but the person or vendor that you no longer wish to receive FeedMe with your preferences, data, RFPs etc.

The utility of the feeds is twofold - you can use them to interact with your friends and you can use them to interact with vendors. This distinction is based on the difference in how we relate to other people online and how vendors relate to us. Ideally, vendors should be treated like any other individuals we interact with - either we want to be relating to them, or not. If not, we can keep them away more effectively by stopping the flow of data they would like to get from us. If yes, with FeedMe we can decide the level of data sharing with them and exercise a greater degree of control over what goes out and to whom than we currently have.

## Social graph Mine!

Social networks and microblogging is the flavour de jour, so to mention here in passing - the Mine could easily host decentralised social networks, for instance equivalents of micro-blogging networks like Twitter. The Mines would share updates in a USENET-like, peer-to-peer manner through the existing "relationship" mechanisms that the Mine supports. As already mentioned, the Mine! is a (infra)structural element that should support other solutions 'flipping' web services from platforms to the individual user.

## Ubiquity and Adoption

Adoption is user-driven.

Vendors will be approached at the same time as users adopt the Mine! to understand and have an opportunity to adjust. The main pressure on the vendors, however, will come from users *doin' their own web thang*, not from wild-eyed VRM evangelists.

The technical underpinning of Mine! is simple and even if adoption were to spread like wildfire, it would be misleading to assume that at any point everybody will have Mines! Suggestions and attempts to hard-wire other bits of technology into the Mine! and FeedMe on the assumption of ubiquity and wide adoption will be resisted both on the individual and the enterprise side. An application that assumes widespread adoption to make it function is either badly designed or premature. It will take time to get vendors to the point where they are able to manage the feeds and adjust their systems. In the meantime, any use cases that require a 'network effect' on the side of the vendors - the scenario can only work if "all of whom have Mines of information" or 'all are using this particular technology' are not on the table right now.

As the usage grows and evolves improvements will be informed by how users apply the Mine!. In the plans as-sketched, the recipients of feeds should be able to muddle along with perfectly normal feed readers for basic HTML and hyperlink-to-JPG data, and next "custom" mine-feed-clients can be easily developed to deal with structured data embedded within feeds, moving on to a truly P2P Mine! structure in the future. An evolutionary progression.

The fear is what happens if (say) Insurance Company A provides a plugin to permit users to create data for only their consumption; that follows the closed source model. It is a potential income if firms look at the Mine! and incorrectly see it as a means of data input for themselves. This is a subtle point, and is why it is so important to keep the VRM story straight. The key point is to look at the empowerment, look at the direction of information flow. The plugins and applications which go into the Mine! must first and foremost add value for the user of themselves, generating data as a side effect. The data is in a generic format worth sharing, gets shared in feeds, and vendors can use that data. Fundamentally, the Mine exists for me to manage and share my data. It is not there as a publishing platform for the benefit of others. It is for the benefit of me. Alas, that message is easily misunderstood up.

## A usage scenario

Let's say I have a wine feed I want to share with a friend. I add you to my relationships graph, decide on the type of data, select tags and objects to go into the feed, generate FeedMe for wine, add it to the Subscription management. This gives me the following crypto-laden, totally random-looking base64-encoded key which is unique to you and my sharing of wine with you:

THIS.OPAQUE.NONCE.REPRESENTS.THE.TUPLE.WINE.FEED.AND.YOU\_MY\_FRIEND

...and I can now give you an ATOM feed URL:

<http://foo.com/mine/feed/THIS.OPAQUE.NONCE.REPRESENTS.THE.TUPLE.WINE....>

...which you can add to your feed reader and learn interesting stuff; any object which is held WITHIN MY FEED and which you might access via HTTP, will have its URL rewritten as being:

<http://foo.com/mine/object/A.DIFFERENT.NONCE.REPRESENTING.OBJECT.42.A...>

...which allows me to:

1. audit when and that you retrieved object number 42 (which is, incidentally, a JPG of a nice Rioja)
2. prevent others from accessing object number 42 without generating their own nonce for a valid relationship and object
3. allow you to respond via:

<http://foo.com/mine/GiveFeedbackUsing/A.DIFFERENT.NONCE.REPRESENTING....>

Then, if at some time I learn that you are abusing my trust, selling the data or illicitly sharing the feed URLs, then I drop you from the relationships graph and your nonces are invalidated. Poof, you're gone.

(Yes, the term *nonce* is being misused here, but *cookie* and *handle* are both too emotive for some people, especially since NFS-Handles are precedent for this.)

## Third-Party-Asserted Data

There are a few issues that will be addressed in the coming months. One of them will be situations where my data is part of transactions that closely involve other parties and the data integrity has to be preserved. An example:

A credit bureau has assigned me a good-credit score. I can't very well be trusted to insert my own credit score into my own Mine! for use with mortgage loan vendors because I'll be tempted to raise it. So the credit bureau let's me subscribe to their feed about my credit score and other activity in my credit history, which allows me a way to pop their digitally signed object (preventing me from tampering with it, proving they wrote it) into my own Mine, for use with whatever vendors I wish.

This is also relevant with healthcare companies - health records shared with doctors and health services providers. One way can be to define the data as unmodifiable by the user. Another answer would be to have the vendor give me a digitally signed, timed-expiry certificate I can drop into my feed, but cannot tamper with. This relies on the credit bureau being part of VRM and we are not there yet, so the solution is dependent on vendor adoption. Such use cases might be interesting to ponder but as we are starting with getting things working for the user first, making Mine! and FeedMe useful - without a necessary involvement of vendors from the start - is a priority. At this stage, we have no control over the vendor side - apart from the enlightened few we are already talking to. The next paper I will cover the vendor side and some scenarios involving vendors who are early adaptors and even innovators alongside Mine! development.

## Formats

To avoid binding data to a particular plugin that operates on it, *objects* or *documents* are treated semi-opaquely, so that the Mine! can manage any format of data. The goal again being to "keep us honest" and prevent us preferring one format over another. That way a user can keep the data in open and accessible formats for sharing and usage, and not be whipped by vendors into providing one data format over another.

I create a *container object* - a bucket of some sort - and using a nice Ajax-y interface. I drag a bunch of JPGs into the *bucket*. The bucket-object is then itself *dropped* into the feed for PrintMyPictures.com who print the results on paper and mail it to me. No more custom-uploader-dialogues for a specific photo printing company. If PrintMyPictures blows it, I just drop the feed on somebody else. No more photosite vendor lock-in.

There should be none of this *thou must use [particular microformat du jour] to use a Mine!* stuff. The only thing really which needs to be mandated is 1) HTTP and 2) Atom, neither of which are user-visible. Put more simply, from a technical perspective what is required from separating function and data is that the data is in one place and clearly delineated from the modules, which present it to the user and operate on it.

The plugins as named in the picture 3 might be Flickr-branded, Flickr-created software modules which you install in your Mine!. This would give you Flickr-like functionality for perhaps a) all Objects of type *image* in the Mine!, or b) all objects which you mark as manipulate-able in the Mine!, or c) some of both. By manipulation, I mean ordering objects

into collections, annotating them, tagging them, doing math on them, having the plugin look at them and suggest that next time you want to buy floorboards it might be cheaper to get them from Home Depot at half the price.

There can likewise be HTML-authoring modules (creates blog-posts, scrapbook posts) and maybe VRML-or-something (pluginJPG) and scribble notes on the *bottleobject*. The plugins shows you a 3D wine cellar, you can grasp *bottle objects*, change labels ( provide object-authoring, -manipulation and -rendering. Gimmicky but possible.

## Hosting

There are three and a half options for where the Object Data will live. The first option, and the one the Mine! is fundamentally designed for, is the wordpress.org model. Download the application to a web server. Given that most users don't have their own web server, another option is to host it with a hosting provider. Then there is the wordpress.com option, where a pure hosting/storage company will be set up for the benefit of those who can't or don't want to arrange their own hosting. This is the least favoured option for the Mine! designers and so we'll be moving towards the file sharing option, such as [Tahoe](#).

## Layering

With feeds as primarily used today on blogs there is a means to respond and comment. The top left hand corner of the Mine! architecture diagram for the Response Handler module - the person (vendor) receiving that feed has chosen to respond to and, if it is a wine merchant, suggest that I might particularly enjoy the 2004 Chardonnay since it has a better flavour. Only entities with whom I have a pre-existing relationship, established by giving them a feed in the first place, are capable of commenting upon objects which I have posted to them. The URL by which they may submit a response object is *tied* to the relationship. Unlike in a blog where the paradigm is "anyone can read my feed, anyone can comment" - instead in the Mine! it's more like "I elect to give feeds to third parties, whom can respond to that which they see in a manner which I can audit".

There has been much talk about RFPs (Request for Proposal) and such and it will make sense for people to reach out to wider circle of vendors when looking for an offer they can't refuse e.g. wine supplies for a large party, a car, a travel package etc. One way of doing this will be to create an open-ended feed, one without a specified recipient

In a world where stakes are higher such as medical records, or to lend credibility to third-party assertions, other technology can be layered but for now

- 1) using cryptography to enforce access control is an overkill and a barrier to comprehension and entry, and
- 2) we ignore third-party assertions since a solution was clearly possible out-of-band and therefore could be ignored, whilst we get on with shuffling opaque objects.

The less we mess around with Atom, the better. The less we have to code, or reuse, the better. The less we try to be an identity solution, the better. The rest can be layered.

## Transactions

The Mine! and FeedMe are starting from a position of offering the user a place for data and a way to share them with vendors in a way that leads to a more balanced relationship. For now transactions are assumed to be completed outside the Mine!. However, the Response Handler described above is a starting point for transactions being potentially handled on the customer

side. A feed going to a vendor will contain a link, in a way similar to comment submission on a blog, where a vendor can leave a response or an offer. The link can be relationship specific, with an 'expiry date' and if abused by spam and unwanted offers, the user can easily cut off the feed to that vendor. There is no reason why the response from the vendor can also contain a link to where the transaction can be completed, bypassing the process of going through the 'front door' of the vendor's site. This needs to be made possible by the vendors and will be one of part of the proposals and suggestions we'll be making to vendors with regard to VRM.

## Prototype

As this is a labour of love (i.e. done in spare time) work is in progress on a prototype to demonstrate the functionality. We hope to inspire others to join the open source project at [VRM NEA](#). For more details contact adriana dot lukas at gmail dot com.

## Some Conclusions

The Mine! and FeedMe are a modest proposal for an alternative to the existing options. One of the emergent consequences I see from usage of the Mine! and FeedMe is the [user-driven identity](#). From blogs to social network profiles, people are learning how to define their thoughts and ideas, [record their lives](#) in [multimedia formats](#), share their experiences, [swarm around causes](#) and [defy companies](#), institutions and authorities. From [linky love](#) to [P2P](#), they are bypassing traditional media and distribution channels, learning the ways of [direct connections](#).

People online build and destroy reputations, create and squander careers, establish themselves as experts or celebrities. That's the bird's eye view. The closer look reveals emergence of *self-defined* (and self-driven) identities. By writing I learn to articulate my thoughts better, by sharing I learn to differentiate from, as well as identify with, others. I become aware of myself and my preferences in ways that in the times before the web were available to a select few.

We now have ways of connecting with others who become validators and authenticators of our *self-defined* and persistent identities. The challenge is to understand and find how to evolve and use those for other than communication and information transactions.

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## Notes:

[1] Talking about ownership of data online in terms of control is fairly pointless. Once your data is out, it's out. So instead of delving into the meaning of ownership and what it means in a decentralised, distributed network where sharing and transparency are default, let's look at how the data is generated by the individual and through interactions with others.

Data as generated online is positive externality to the vendors and platforms that capture our data. Positive externality is something that is not part of the value traded in market exchanges. It is something one of the parties in the trade benefits from, without having to pay for it. For illustration, pollution is considered a negative externality as it is a) by-product of manufacturing processes and b) is not included in the cost or price of the products. So, when I am buying something from Amazon or Virgin Atlantic sites, the value exchange is the goods they provide and the money I pay for them. My data is external to the transaction - they are not paying for it and I am not being paid for it. Nevertheless, the vendors benefit by using the data in ways that help their business - from mining to selling it on. I have a scant legal protection against that and even with Data Protection Act and other restrictions on those who capture my data, the big part of the data collected from me is for marketing purposes and way

above the threshold of legally required data to complete transactions. The advent of the 'free' web has confused this distinction - of data as inherent in the value exchange and data as positive externality - simply because most platforms with web services have turned what is essentially an external benefit from other value exchanges to foundations of their business models. The 'free services' I receive are 'paid for' by my attention and/or my data - both eagerly gathered by the platforms.

Advertising is a way to monetise the attention and the race to monetising my data (short of crude selling on) is still on. Given this, I argue that I do own my data and it should not be considered a payment for the (free) web services unless it is so specified in the terms of the exchange or service. It is merely a shift from one business model - online retail such as Amazon, to another where data becomes the value exchanged tacitly and without clear understanding. This is another reason why privacy remains an issue with such web services and platforms. As long as I have to depend on a third party to protect my privacy, it will be exposed.

### **Credit:**

Major credit to Alec Muffett for acting as an (in)sanity check and a sounding board throughout the process of writing this and a source of the technical underpinning and implementation. Many thanks to Lauren Hudson for hammering and massaging my thoughts and writings scattered across many emails and posts together into the first readable draft.

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## **Appendix I**

### **Design - and other - principles for the Mine! and FeedMe**

**User-driven** (as opposed to just *user-centric*) - the tuna salad argument: "*Don't give me the salad give me the ingredients & utensils and I will make my own*". A simple test of [user-driven design](#) is in the answer to a question - *Can and does the user add value to it?*

**Simple** - complexity will come from people using it, not from design (think [BitTorrent](#) )

**Fast and lightweight** - if something slows it down don't use it or design it differently

**Economical** - not inventing anything if existing technology/code can be used, if anything must be invented, make sure that user can't tell! we are creating better tools for users, not trying to improve what they want to do; i.e. giving them better ways of doing what they are already doing. if we try to improve what they want to do, we are not doing our job - nifty technology is good but usage is even better.

**Modular** - we are not creating a tool/application/platform that can do everything for them, we are creating the best modular tools for specific functions and let the user put them together. To quote Alec: *[this is] an exercise in user-intuitive data logistics operating at layers 3 through 7, and I am STRONGLY opposed to it being inflated into a platform for addressing "layer-8" administrivium of how people want to contract, until such time as the software exists and is freely available on the web. I will not let the project to be scope-creeped into an DRM solution, an EDI solution, a calendaring application, spreadsheet, authentication agent, tasty dessert AND a floorwax. Amen, brother.*

**Infrastructural** - Mine! and FeedMe are (part of) of a layer on which others can build - in terms of a car, we build the engine but the user decides the shape, colour, number of doors,

seats and, of course, how and where to drive it. Not sure it works as an analogy but will ponder further. If a functionality can be done outside the Mine! and FeedMe, then it ought to be left out.

**Interoperable & compatible** - External plug-ins, applications, modules are added to the Mine! to perform the functions that user needs/wants, these can be developed by anyone

**Flexible** - challenge is to create a 'personal platform' that is flexible enough to accommodate other applications - APIs etc and secure enough to keep my data private

**Independent** - not locked into a particular platform or a silo (e.g. eBay, Facebook, MySpace, Amazon), closer to blogging (WordPress), feed readers (OPML) etc

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## Appendix II

### **VRM Background - summary of what VRM means to the author of this paper:**

Imagine being able to take charge of your information and data, notes and records about past transactions, your purchase history, future plans and ideas, preferences and knowledge about areas of your life. At the moment you are the last person to be able to benefit from all this accessible only via various platforms. Your 'digital detritus' is not yours, it is information that others harvest and use for their own purposes. Imagine to be able to do that with the same ease as checking email, posting to a blog, adding a bookmark to del.icio.us, searching Google, commenting on an article, uploading a photo to Flickr, managing your google or ical calendar, leaving a review on Amazon, adding an application on Facebook. All this whilst protecting your privacy to the degree you find comfortable, sharing your activity or data as you wish, not as mandated by the platform providing some functionality in exchange for your data (Facebook, Amazon etc).

Imagine having your customers share with you what they like, want and think of you. At the moment, you are dependent on market research, which is like looking through a keyhole at the rich 'user-generated' world. Imagine being able to relate to your customers, consistently and persistently, where they contribute directly to your supply chain where it makes sense - whether it is R&D, product design, distribution and marketing. Interaction with them is modular, intuitive and user-driven freeing much of your resources spent on marketing and transaction cost.

The above is part of the vision of the Project VRM. The name stands for Vendor Relationship Management and it originates from 'flipping' CRM - customer relationship management. Project VRM is a community-driven effort to support the creation and building of VRM tools. The project is headquartered at the Berkman Center for Internet and Society at Harvard University and headed by Doc Searls, a fellow with the center. The project is building a framework that sets standards and protocols for a category of tools that enable individuals and organizations to relate and transact on more equivalent terms. By minimizing the leverage and control one party has over another in a (typically commercial) relationship, individuals and organizations can instead focus on [creating and sharing value](#). The VRM opportunity is not rooted in us vs. them emotionally-driven arguments but in creating a more efficient and balance relationship between business and their customers, markets and companies, demand and supply.

#### **What's in it for the individual?**

The ability to manage and analyze your data will give you better knowledge about yourself, the kind of knowledge that is the holy grail of most companies' customer data management. The awareness of your preferences, understanding of your needs will help you to articulate them easier and strengthen your position with vendors.

**What's in it for businesses?**

We live in an increasingly decentralized world with more customer choice, yet vendors continue to fiercely collect and control customer data and exploit the opportunities therein. The ultimate goal of VRM is better relationships between customers and vendors, by considering and constructing tools that put the customer in control of their data and ultimately their relationships with other individuals, companies and institutions.

**Benefits of 'letting go' of customer data:**

- Customers share the burden of storing and protecting the data - eases compliance, privacy & security concerns
- Increased access to information about customers - direct benefits to the customer to share more data rather than less.
- New services from previously unavailable access to customer data